THE EVOLUTION OF HOBART

A Study in Historical Geography with Special Reference to Urban Fabric and Function, *circa* 1804-1963

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Preface

This thesis is primarily a study in historical geography. It seeks to trace the development of one small centre of population to city status. In so doing an attempt is made to expose, define and evaluate the processes which influence functional differentiation in a growing settlement node.

Many would agree with Handlin that "we need fewer studies of the city in history than of the history of cities," though some would disagree that "no amount of theorising about the nature of cities"[1] will answer questions posed by their individual and regional differences. While the subject of this investigation is essentially a microcosm having "the advantage of permitting a close and detailed study" it is hoped to avoid, in part at least, the accompanying "drawback of being non-representative."[2]

Account is taken, therefore, of work in the field of urban geography as well as that in historical geography as such. In fact in the geographical literature the two have overlapped remarkably infrequently, given the considerable body of published material under each head. There are, nevertheless, historical accounts of the city's development, notably Mumford's The City in History, and more briefly Smailes' The Geography of Towns, and there are more concentrated analyses of single cities or certain of their components, such as Spate's essay on "The growth of London, 1660-1800 A.D." and Conzen's "Alnwick, Northumberland: a study in town plan analysis."

The seemingly simple (but often complex)facts of the physical appearance and composition of towns have held a considerable fascination for the writer since undergraduate days, though Australian townscapes could not fulfill the promise of Dickinson's The West European City. Happily, the cities and towns of Europe did,

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1 O. Handlin & J. Burchard (eds): The Historian and the City, Harvard, 1963, p. 26

2 W.S. Allen: The Nazi Seizure of Power. The experience of a single German town 1930-1935, London, 1966, p. x

and the pleasure of residing in Oxford was much supplemented by visits to many of the major and some of the minor urban places from Galway to Athens and from Oslo to Granada. Experience of non-European cultural influences initially confined to a few route centres like Cairo and Bombay was extended by more recent exposure to some Middle Eastern, Japanese and South Asian centres; but more directly relevant to the present study was the opportunity of making the passing acquaintance of numerous North American settlements and more particularly of examining, intensively if briefly, structural aspects of well-studied cities such as Chicago (with Harold Mayer) and Minneapolis (with John Borchert), finding those features so well portrayed in Tunnard and Reed's American Skyline.

Mention of urban structure raises other issues than the enjoyment and meaning per se of Londinium's Roman Wall exposed in the present Barbican district, of Dubrovnik's exclusively pedestrian Plaza formed by the 12th century infilling of the narrow sea channel separating Roman Ragusa from Slav Dubrovnik, or of the 18th Century Franco-Spanish architecture found in New Orleans' Vieux Carré. Contemporary morphology must represent the present state of urban evolutionary processes, decline and replacement as well as growth and extension.

So, in attempting to explain developing urbanism it is not enough only to trace the multiplication of people and buildings or even to reconstruct an earlier phase of existence such as colonial Hobart of the 1840s. The evolution of urban functions requires the portrayal of the city rampant as well as the city couchant, and thereby some contact with the dynamically oriented writing of those who emphasise land use, land values and the business core. Although Hoyt published his One Hundred Years of Land Values in Chicago in 1933, and Firey's Land Use in Central Boston dates from 1947, major geographical study of the Central Business District follows Murphy and Vance's work of 1954, to such extent that Berry has alone or in collaboration produced several works such as Commercial Structure and Commercial Blight. Retail Patterns and Processes in the

City of Chicago (1963).

It is not the aim of this study to become deeply involved with contemporary C.B.D. analysis. Although the central and inner suburban area of mid-20th century Hobart receives most attention it is examined with the intention of explaining its evolution up to the present, the relationships of form, fabric and function, and the implications of their interplay for the future.

When this subject was taken up several years ago it was the writer's intention to find out everything there was to know, from the historical-geographical viewpoint, about the Hobart settlement. It seemed that here was a centre of sufficient population, size and longevity to allow detailed study by one person and yet provide findings of potential significance for urban centres of less manageable scale and indeed contribute to the understanding of the widely experienced process of urbanisation. This, one hopes, is still the case, but as Tiebout warned: "The researcher may try to study everything about a community. This usually turns out to be an impossible task. Generally some logical framework is needed."[3] As the cross-currents of interest and the counter-demands of academic involvement and teaching have grown stronger with the years the desire for omniscience has had to be tempered with the alloy of selectivity. Hence, certain related themes: physical growth, property values, functional change, townscape.

The task of clothing each of these sections of the evolutionary frame has been extremely time-consuming (for example, the maps of property valuation averages for 1847 and 1954 were produced after 1000 hours' work), as practising historical geographers (and, doubtless, historians) will know. Sampling has not been for the most part a satisfactory alternative: documentary evidence cannot be sampled (it can only be ignored), and the construction of a functional pattern or reconstruction of a townscape depends on juxtaposition of the components. Area selection rather than numerical selection can be employed, but presentation of the whole

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3 C.M. Tiebout: The urban economic base reconsidered, Land Economics, 32, 1956, p. 99

is the only completely satisfying procedure in attempting to portray the character of past settlement. That being said, it must be confessed that some documentary evidence has at best been sampled and at worst ignored. A whole history of Hobart could be constructed from the parliamentary journals alone, and another from the newspapers available from 1816. The former have been thoroughly surveyed but far from exhaustively used; the latter have been sparingly consulted as a particular need or lead arose. However, these sources are more valuable to the historian than the geographer, and extensive consultation of published description and analysis in books and journals, including all those in the Tasmanian catalogue of the British Museum, has been considered a reasonable coverage.

Direct evidence of the spatial elements with which the thesis is basically concerned depends on three sources: maps, illustrations (photographs, paintings and engravings), and property valuation records. The most comprehensive cartographic source has been the uncatalogued collection of the Lands and Surveys Department, Hobart. The examination, sorting and partial copying of these plans formed the groundwork of the investigation. Other cartographic sources, in approximate order of usefulness, have been those of the Public Record Office, London; the Marine Board of Hobart; the manuscript plans of Lands and Surveys Department and Colonial Secretary's Office files in the State Archives, Hobart; the Royal Society of Tasmania; the British Museum; and the Royal Geographical Society, London. Illustrative evidence, apart from the author's photographs, comes from two main repositories: the Tasmaniana collection of Dr. C. Craig, Launceston, and the Tasmanian Museum, Hobart. The Mitchell Library, Sydney, did not prove a major source for these materials.

Of all the rewarding sources only the London collections were catalogued, so the extensive use of copied and re-drawn illustrations, in addition to the original maps drawn from prepared data, seeks to record valuable evidence buried from the general view as well as to familiarise the reader with the elements of townscape and town structure which are the subject of analysis. The air photograph

mosaic which appears as the frontispiece is the first compiled for Hobart, becoming available just as the writer was testing the practicability of a substitute production.

The valuation lists and rolls of Hobart property are an invaluable source. As quantitative measures they are informative as recorded, but their real value is seen only when they are geographically -- that is, spatially -- applied. The matter of application is formidable, and the possibility of valuation offices recording their assessments in block units should be attractive to many students of urban form and processes. The larger the urban entities become the more important will be the recording of data in utilisable form.

The only previous studies of Hobart's geography have been those by Peter Scott, beginning with his "Hobart: an emergent city"[4] (later extending to the other capitals), together with several Honours theses supervised by Professor Scott, the writer, or both. As far as is known, no other Australian city has been subjected to the intensity of analysis as here presented. The larger they are the less practicable is the possibility of an individual's examining more than one or two selected aspects of urban structure. The most recent evidence of that being effectively carried out is Logan's "The Geography of Manufacturing in an Australian City."[5] As for Hobart, the intensity of study varies with areal extent. The colonial town area of the 1840s is the focus. Later growth of population and of the built-up area are traced but their influence upon inner urban form and structure are more closely analysed. That part of the present metropolitan area east of the Derwent estuary receives least attention. It was not linked to the Hobart population until the 1921 census and the river was not bridged until 1943.

In the presentation of the substance an attempt has been made to keep footnotes within bounds. Quotations and statistics are normally footnoted giving page references. Where the argument or the facts bear more generally upon a source it is denoted in the text by a

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4 P. Scott: Hobart: an emergent city, Australian Geographer, 6, 1955, pp. 19-31

5 Unpublished doctoral thesis, University of Sydney, 1965

bracketed number appearing after the same at the end of the chapter, in full title. Other references which bear directly or indirectly upon the author's thinking and the written text are found in the more complete bibliography at the rear. Abbreviations are not widely used; where they appear, as with V.D.L. for Van Diemen's Land or C.B.D. for Central Business District, previous use in full should obviate any problem of recognition. The quality of the electric typewriter cannot be gainsaid, but its lack of the £ sign gives rise to the ℔ used throughout in denoting our now defunct unit of currency.

While the concept and the substance of this thesis are my own unless otherwise acknowledged, an undertaking of this kind cannot be completed without the cooperation of others. The late Peter Eldershaw and Mr. G.T. Stilwell of the State Archives, and Mr. M.Phillips of the Lands and Surveys Department have given most willing assistance. Mr. A.L. Steed, Port Manager of the Hobart Marine Board and Mr. T. Errey formerly of that office are also thanked for their provision of access to source materials. Dr. W. Bryden, Miss E. Geddes and Miss Melrose of the Tasmanian Museum were helpful with their collections, and Dr. C. Craig very kindly allowed his early illustrations to be copied. The mileage involved in townscape assessment was much lightened by the company and opinion of Mr. D. Ryder-Turner. Mr. P. Hanson and particularly Mr. G. van de Geer deserve acknowledgement in the preparation of maps, and the considerable task of printing maps and photographs fell mainly to the lot of the University of Tasmania Photographic Section under Mr. A. Beswick. The electoral correlations could not have been produced without the computer programme prepared and run by Mr. N.K. Chick, and to Miss R.S.J. Farmer I owe thanks for discussions concerning Tasmania's population.

For sustained assistance beyond the call of duty I wish most sincerely to thank Mrs. Hilla Chapman and Mrs. Gillean Lord. To my wife and daughters I hope now to be more generally accessible.

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Introduction

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Any significant dissertation, whether truly philosophical (as once expected) or wholly material (as often now), should attempt to present its facts and interpretations within the framework or against the background of previous thought and practice in the chosen field. Despite Hartshorne's finding of general agreement on the definition of historical geography in 1939 probably none of the several fields of geographical enquiry has been more variously approached, and the practical definition has accordingly stemmed more from example than from precept.

There have, of course, been methodological papers from leading exponents of the medium in the present era. Sauer, East, Darby, Ogilvie and Gilbert are among those writing in English who have examined the place, scope or structure of historical geography in the last thirty five years. The major assessments of the subject during that period, The Nature of Geography, The Spirit and Purpose of Geography, American Geography: Inventory and Prospect, and Frontiers in Geographical Teaching have included analyses of historical geography by R. Hartshorne, G. East, A. Clark and C.I. Smith, respectively. All these deserve reference and repay examination, but possibly the most concise recent appraisal of central issues in historical geography is found in O.H.K. Spate's "The nature of historical geography", produced as a cyclostyled Monthly Bulletin (No. 7, 1962) of the Geographical Society of New South Wales.

The argument is not concerned with whether the story of geographical exploration, the history of geography, or geographical influences upon historical events are properly part of historical geography. Rather, it deals with the role of history in historical geography and the inadequacy of the reconstruction of past geography as a total accounting of the field. There is really no denying that the history in historical geography should involve sequence and process, not just data relating to times past. Just as the understanding of contemporary geography

is enhanced by a knowledge of earlier geographical conditions, so should the presentation of historical geography involve the assessment of historical and political influences upon geographical distributions.

It is here that the inevitable conflict between ideal and reality occurs. Unfortunate though it may be, Spate remains one of the very few geographers who on his own assertion "has undoubtedly read more history....than geography". For those whose historical training was less and who cannot or will not put aside their research or their teaching for a comprehensive saturation programme in history, Hartshorne's "student trained as a geographer" with historical knowledge "for a very limited area" may be nearer the norm. If this implies an acceptance of less than optimum standards or equipment we must bear in mind that addition or substitution of the qualification "for a limited time" may redeem the situation somewhat. In other words, the time scale as well as the spatial scale influences the intensity and the efficacy of the enquiry.

To acquire a sufficiently thorough knowledge of post-Roman European history to make valid interpretations of the influence of events on changing British geographical distributions through that time would seem a much taller order than gaining familiarity with less than 200 years of Australian history for a similar purpose. Which is presumably why Spate conceded that much work in Australian historical geography "must be precisely 'economic history plus maps'": most of our major influences for change have been economic — the goldrushes, the depressions of the 1890s and 1930s, the World Wars. Certainly by most comparisons Australia has experienced political stability and social homogeneity, so that we look to economic developments for explanations of sequential geographical relationships. Nevertheless, in both contemporary and historical geography the influence of local (if not national) political decisions has been underrated and even neglected, and there are indications that the growing amount of research on essentially finite subjects will produce scrutiny of the intensity long since arrived at in some, though not all, European fields.

Be that as it may, "economic history plus maps" can presumably be

good historical geography, providing that areal relationships are of central concern and the time element is sequential rather than static. Whether or not our history includes more economics than politics or sociology, the main issue for the writing of historical geography anywhere is undoubtedly the question: sequence or stage? This can be interpreted as dynamic or static; in Darby's terms, the movie film as against the still; the vertical theme or the cross-section approach. But perhaps this should be questioned. While conceding again that history should embrace sequence, it does seem that in stressing the limitations of "reconstruction" Spate depicted too large a gap between the worth of the thoroughly geographical period-piece and the study of change. Does the recognition of sequential geographical relationship as the highest form of historical-geographical explanation really mean that the geography of Hobart in the 1840s, reconstructed in the 1960s, has to go under another name such as "retrospective geography"? One fears that the game becomes too complicated if that is the case. How short must be the sequence before it is still, how long before it is dynamic -- and respectable?

It is difficult to conceive a cross-section that in practice is depicted as wholly static. The analysis of geographical relationships through a short period, even at a point, of time, can hardly fail to touch upon origins. Even though that depiction may become a stepping stone to higher explanations it is of the same materials and skills as employed in the longer sequence of which it becomes part. It is true that many significant differences are matters of degree, and in that sense there is good reason to acknowledge the inherent differences in the nature of cross-section and vertical theme. But to do so need not imply that there is really only one valid approach to historical geography, any more than that regional geography is only properly seen from the viewpoint of uniform regions.

In so far as it is past total geography rather than a branch of the whole, historical geography has most in common with regional geography, which, above all, involves itself in inter-relationships and multiple influences. The determinism-possibilism argument has been sufficiently inactive in recent years to obviate the need to defend the use of

'influences', but whether or not "determined anti-determinists" still exist one can but come to the conclusion that geographical reasons (of situation and environment) are at least as important in explaining the gradualness of Hobart's urbanisation as in accounting for the persistent Appalachian wedge of Republican voting in the Democratic South to which Spate referred.

If historical geography at its best is determinedly sequential and urban geography is a particular form of regionalism, then historical urban geography probably has no peer in the area of complex inter-relationships. Certainly, this writer cannot conceive of a more challenging task of presentation than explaining spatial relationships over time: by holding time more or less constant and concentrating on spatial variations the worst difficulties of presentation are avoided, but at the cost of sequence. Alternatively, thematic sequence can be the first aim, but then the essentially historical problem of weaving all the threads progressively, or of repeating explanations as themes are followed in turn, is complicated by the necessity of referring to areal patterns and thus the whole range of inter-relationships.

It is unlikely that any hitherto unsuspected method of dealing with this problem of the temporal and spatial will be devised, and no novel solution is proposed here. An attempt is made, however, to present reconstruction and sequence as complementary analyses of evolving urban components. Hobart is first examined at or near the height of its colonial powers at a time when a detailed ground survey of the town's buildings more or less coincided with the first comprehensive property valuation of 1847. In part 2 the underpinnings of this reconstruction are examined sequentially from the foundation of the settlement. The mid-twentieth century city is analysed in Part 3, with special reference to townscape components and colonial persistence, to functional structure, and to property and people. Part 4 traces a century's urban growth, its impact on inner city functional composition including port development, on the distribution of central property values, and on the nature of the urban population.

For only a brief period in its history has Hobart held a position

of major importance in the Australian settlement pattern. While the Sydney hinterland remained seaward of the Blue Mountains and before Brisbane, Adelaide and Melbourne were established, Hobart Town ranked second only to the settlement at Sydney Cove. Rapid land granting enabled wool production for export and wheat grown east of Hobart found a strong demand in N.S.W. proper before the parent colony achieved self-sufficiency on the vast tract of the western slopes and plains. It was not long before this area, the Darling Downs, and the rich lands of Australia Felix -- Melbourne's hinterland -- pointed up three fundamental limitations in the geographical character of Van Diemen's Land which were consistently to influence the island's development and that of its capital, Hobart: insularity, peripherality to the Australian mainland, and the relatively small area of productive land.

If these physical and locational limitations needed emphasis the Victorian gold rushes from 1850 and the blossoming of Melbourne's population from 30,000 in 1852 to 100,000 in 1855 set the seal on Hobart's place in the developing Australian settlement hierarchy. The town's exclusion from the front rank was reinforced in the 1870s when the replacement of sail by steam in the London-New Zealand shipping traffic reduced the significance of the Westerlies, and sailings moved northwards via Melbourne and Sydney in lieu of the regular port of call, Hobart.

Within Tasmania Hobart has always enjoyed a position of primacy, although for a time Launceston seemed likely to offer a challenge to its urban leadership. As it happened the two centres settled down to an approximately 2:1 population relationship which is easily the lowest ratio between 1st and 2nd centres in any of the Australian States. Even so, Hobart and Launceston together hold a lesser proportion of their State's population than the other capitals do of theirs. The more balanced distribution of Tasmanian population throughout the occupied areas, coupled with the physical and positional limitations already mentioned, broadly account for the modest scale of growth which has characterised Hobart's urban development.

Part 1

Hobart Town circa 1847: a colonial capital

> Q. "What is the chief town?"
> A. "Hobart Town, on the river Derwent."
>
> - Lt.Col. Sir T.L.Mitchell: The Australian geography, with the shores of the Pacific and those of the Indian Ocean, 1851

There are several reasons for believing that Hobart's golden age was experienced in the last decade of the first half century of European settlement in Tasmania. Despite the cyclical depression of 1840-44 propounded by Hartwell (1) the most fundamental uncertainties of earlier economic life had been significantly reduced by the 1840s through the development of local grain production and sheep rearing and by the establishment of various small but important manufactories. Frequent, and in part regular, shipping movements linked Hobart with ports both far and near. The town itself had attained a degree of functional differentiation and physical provision sufficient to draw comparison (as well as contrast) with older and larger centres. And in the context of colonial Australia Hobart enjoyed a relative importance which more than a hundred subsequent years have failed to recapture.

Surveyor-General James Sprent's detailed survey of Hobart's streets and buildings was begun in 1841 and forms an invaluable record of the physical structure of the colonial town in the early 1840s. The first valuation of Hobart property was published in January of 1847, which was also a Census year. These and other materials have permitted a fairly complete analysis of the Van Diemen's Land capital forty years after foundation.

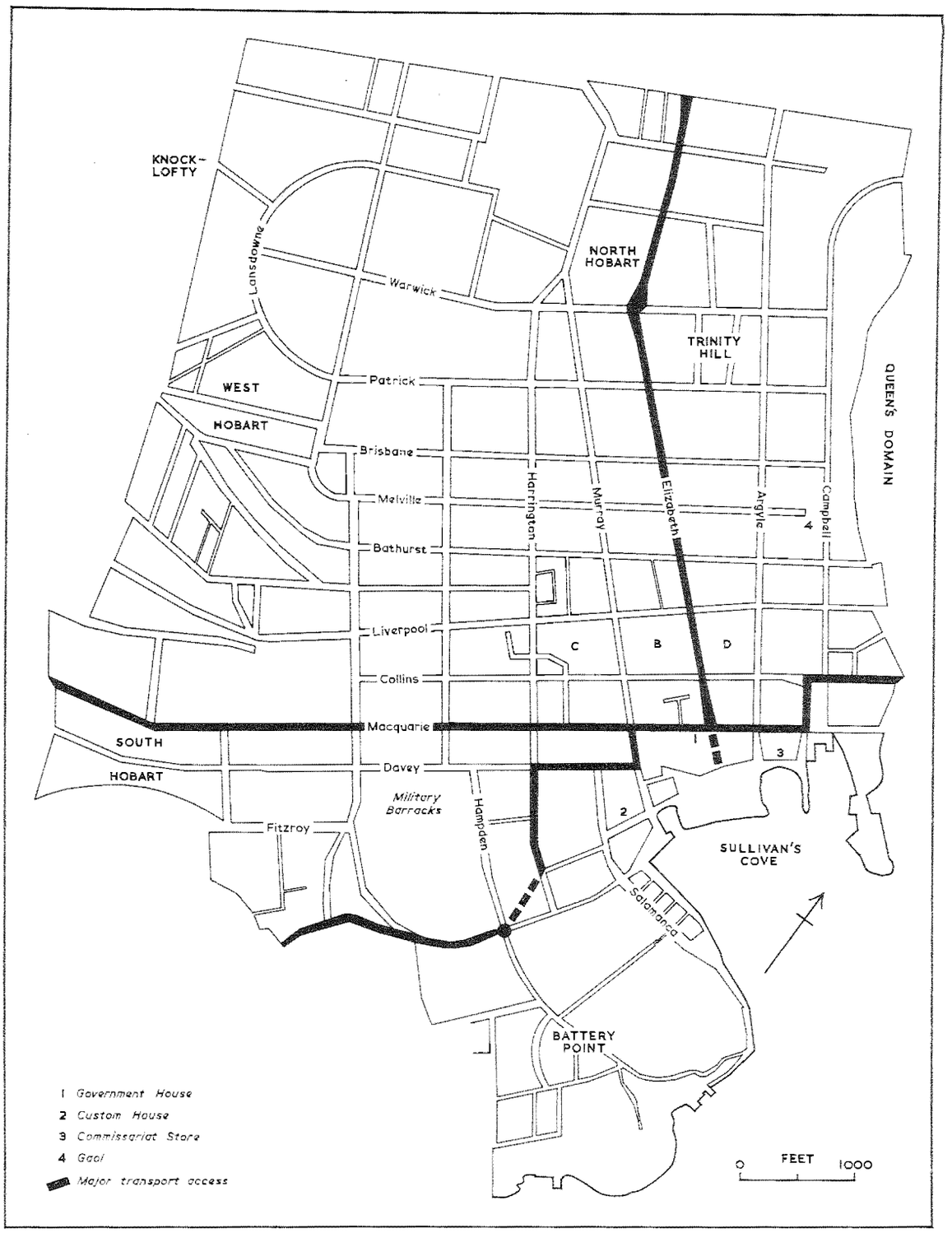

Fig. 1.2 Localities and streets of Hobart Town 1847. The gaol in the key was the convict barracks.

Chapter 1

The Urban Landscape

The Hobart Town surveyed by Sprent from February 1841 consisted of more than 100 clearly bounded town blocks and a few irregular contiguous areas (Figure 1.2). The whole contained almost 2400 separate buildings. Their distribution, shown in Figure 1.3, deserves comment.[1] It is evident that after 40 years of settlement the initial twin attractions of the river harbour and the rivulet had not been superseded by other factors: the greatest concentration of buildings lay around the lower course of the Hobart Town Rivulet where it approached the Derwent estuary, and the adjacent land nearest the harbour was occupied by a series of public buildings.

The influence of geographical inertia would of course be strongly against any major shift in the initial centre of gravity unless serious disadvantages of the established area became apparent through time. Only one such disadvantage had been noted with any consistency by observers of the Hobart scene, and that concerned the rivulet itself. The low-lying area around its mouth was poorly drained, forming almost impassable swampy ground in winter (2). This was to be expected since the Hobart Rivulet was joined by the lesser Domain (Park Street) Rivulet at the lowest point of Collins Street and then turned through more than a right angle to follow approximately the line of the Domain stream into the bay to the right of the Old Wharf (Hunter Street) causeway as in Figure 7.10. Clearly, the backing up of water at times of high flow was always a possibility at the confluence point, with the block between lower Collins and Macquarie Streets having the greatest potential for inundation.[2] There is little doubt that, in the 1820s at least, the discharge

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1 There are slight inaccuracies of block size and alignment in some peripheral areas of Figure 1.3, resulting from the piecing together of 14 sections compiled from re-drawn reductions of photostatic copies of the 74 sheets which composed Sprent's survey. Sprent did not leave a record of the port area seaward of the dotted line shown, nor did he show the military barracks buildings; these have been added from other near-contemporary sources.

2 The capacity of the Hobart Rivulet for flooding was demonstrated as recently as April 1960, when the area most affected was the same lower Collins Street vicinity, known as Wapping in earlier days. The increasing restriction of the rivulet's course by commercial development in the C.B.D. should be acknowledged as a contributing factor.

Fig. 1.3 Sprent's survey of Hobart Town 1841--. (Composite of Sprent's plan, Lands & Surveys Dept., except port area inside the dashed line -- Hobart plan No. 19, Lands & Surveys Dept., and the military barracks buildings -- various sources).

problem was enhanced by the use of the rivulet as a receptacle for dead animals and refuse generally (2, 3). The pollution promoted the construction of an aqueduct to carry clean water to the barracks and some principal streets.

By the time of Sprent's survey many of the town's inner blocks had been almost fully occupied, in the sense that most of their allotments carried buildings, but the density of buildings and the proportion of built-up land was notably highest in a few blocks between Murray and Argyle Streets. The main axes of building development were clearly Elizabeth and Liverpool Streets, whose leading functional rôle will be considered in Chapter 3. The commercial centre was partially separated from the waterfront by the Treasury buildings, Government House at the foot of Elizabeth Street, and the Commissariat Stores. It was not until the 1850s, however, that the western shore of Sullivan Cove (shown in process of reclamation in Figure 1.3) became functional. In the 1840s the needs of shipping were served by Old Wharf, in which the original components of Hunter's Island and a tidally exposed spit were already barely recognizable; and by the more recently developed south (Battery Point) side known as New Wharf. Here the long established warehouses of Old Wharf were supplemented in the late 1830s by John Lee Archer's impressively designed Ordnance Stores near the battery from which the point took its name; and at the foot of Kelly Street by the nucleus of stone warehouses which have made Salamanca Place an important piece of Australian architectural history.

At the corner of New Wharf and the western shore the fine new Custom House, also by Archer (4), and the open market in front of it occupied previously swampy land built up during the construction of the wharf. Both of these were well placed to deal with the goods which were unloaded at their very doorstep.

Behind the row of warehouses the line of Kelly Street provided the main break in a substantially unoccupied area north of Hampden Road (Figures 1.2 and 1.3). Between the two the concept of Arthur's Circus is indicated (Figure 1.3) by the subdivisional pattern, but building did not take place until about 1846, by which time Sprent was using his

surveyor's chain elsewhere. Below (east of) the circus Secheron House continued to occupy a position of splendid isolation, though sub-division was about to change that. Further west St. George's Church stood on the fringe of the southern slope of the ridge as yet wholly undeveloped.

There was, in the town area as a whole, a general lessening in the intensity of occupance outward from the intersection of Elizabeth and Liverpool Streets. The least occupied zone was the northwest corner, on the slopes of Knocklofty. This was indeed at some distance from the centre of things, but is indicative of a situation where, at this time at least, building sites with a view were not obviously favoured over those with ready access to the town centre. In a situation of such topographic diversity as Hobart's what constitutes a 'view' is open to argument, and at this point it may be more useful to examine whether the pattern of occupance of the town at or near the height of its colonial fortunes had taken an expected or predictable form.

Predictability of the Pattern

Essentially settlement spread northwest along the depression between the two main areas of higher relief, the dolerite hill of the Queen's Domain and the sandstone and dolerite hill of Knocklofty (Figure 1.1). A southerly component followed the valley of the Hobart Rivulet westward towards the Cascades. The negative rôle of the Domain was not wholly physical since its reservation as Crown land undoubtedly prevented occupation by those who sought sites both elevated and near. A few at least were not inhibited by the equally steep and less proximate slopes of Knocklofty where the houses extended as far as the 400-foot contour above Lansdowne Crescent and to 330 feet on the ridge between Salvator Rosa's Glen and the Hobart Rivulet.

Other local eminences were variously occupied: the Barracks looked across the town centre and the bay from 160 feet, almost from the first years of settlement, and from the early 1840s Trinity Church (replacing the Penitentiary Chapel, or Old Trinity) capped the northern hill of the same elevation which formed the first real vantage point in a land

surface which rose moderately to 100 feet half a mile from Sullivan Cove (Figure 1.2). The larger hill of Mount Nelson further down the Derwent estuary formed an excellent signal station site, but another century was to pass before it came into calculations for general residential occupation. Meantime its effect was to confine the Sandy Bay farms to the half mile-wide strip of land between the river and approximately the 300-foot contour.

In fact the limits of contiguous settlement in Hobart of the 1840s encompassed most of the low land having relatively unobstructed surface and visual communication with the founding site. Thereafter the general extension of the urban area north and south along the river and to a lesser extent westward into the piedmont valleys of the Mt. Wellington massif began the attenuated plan of the present. Even so, the still compact settlement of Sprent's time was not without problems stemming from the basically hilly nature of the site as a whole and the adoption of a largely grid-pattern of streets. Some of the western streets ran steeply across rather than with the slope of the land, Molle Street, for instance, rising from less than 100 feet at the rivulet to almost 300 feet at Brisbane Street little more than 600 yards away -- a gradient of one in nine. Butler Stoney, an acute mid-century observer, found it necessary to comment on the inconvenience attending the ascent of hills "so steep in some places as to cause great drawbacks to speedy traffic -- a matter of essential service in a trading town...."(5).

Street levels and gradients were not always quite the same as they are now; even a short history of settlement can provide buried evidence. Excavations for the revival of Cat and Fiddle Alley in 1961 revealed the lower rooms and barred windows of a stone building which had stood beside the early rivulet approximately 10 feet below the present surface of Murray Street between Collins and Liverpool Streets. The gradient of Murray was therefore much steeper in that central valley zone, and the same is undoubtedly true of other cross streets before bridging operations raised the road levels. The consequences of such developments were commented upon in 1839, as follows:-

Fig. 1.4 Characteristic Australian Georgian outlines (after Morton Herman).

Fig. 1.5 Georgian cottage, Burnett Street, North Hobart, 1963. Twin chimney and twelve-pane windows missing. Demolished 1966.

"Dwellings having been erected long before the streets were made and the town being upon a very irregular surface, some of the buildings in consequence now occupy very awkward situations. On one side of a street, they are often elevated much above the level; while, on the other, they are sunk considerably beneath it" (6).

Building Characteristics

The quality and size of the buildings which comprised the settlement of the 1840s varied widely, but a common link was the almost universal representation of the Georgian style of architecture. The early colonists constructed their permanent houses in the likeness of those they knew, and so in town and country the Georgian cottage held sway. Most commercial and public buildings were variations on the Georgian theme, if the evidence of relict buildings and contemporary drawings is to be believed.

Boyd (7) has portrayed this architectural phenomenon in the sequence of domestic building styles in Australia, and his "type" sketches are readily identifiable in the field. Herman, however, deals in greater detail with Georgian buildings (of New South Wales), and some characteristic forms are illustrated in Figure 1.4 (8). The Georgian house has a specific place in time, and yet the simplicity of its design gives a timelessness which enables it to make a dignified contribution to almost any mix of townscape. In the small Georgian cottage Boyd notes "The child-like conception of the façade as a face; two eye windows, a nose front door, red brick eye-brow arches in the whitewashed wall, a brimless hat with a high crown of shingles. The only conscious decoration was a semi-circular fanlight, sometimes hollowed out of a single piece of cedar".[3] The more important of these characteristics are illustrated in the small house in Figure 1.5.

This basic form, called Georgian Primitive by Boyd, was developed in New South Wales into the Colonial Georgian by an enlargement of the

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3 R. Boyd: Australia's Home, p. 19

Fig. 1.6 Larger Colonial Georgian house, Sydney, 1965. Verandah under main roof of slate supported by slim columns. Iron lacework not common in Hobart.

Fig. 1.7 Two-storey Georgian, one of the best and least modified of Hobart's colonial houses, Hampden Road, Battery Point, 1962. Projecting vertical strips of masonry lend strengthened column-effect to stone facade; other walls of brick. Hipped roof of iron probably replaces slate or shingles. Constructed 1836, now Folk Museum. (Don Stephens photograph).

scale and the addition of a verandah as an integral part of the house, supported at the front by light timber columns (Figure 1.6). In Tasmania some good rural examples exist, as illustrated by Sharland (9); but the more subdued summer sun presumably provided less cause for shading, and the English model was only infrequently subjected to colonial adaptation in Hobart.

By no means all the town houses were as modest as that illustrated in Figure 1.5. Some of the two-storey residences achieved the classical lines of their English models, and more particularly they captured something of the spirit of the great gubernatorial builder, Macquarie.[4] The common elements in the simpler and grander versions of the Georgian house can be seen by comparing Figures 1.5 and 1.7. The central door, the symmetry of windows about the door, the shape of the hipped roof (though the pitch varied considerably), and the position of the chimneys are most notable.

There is little danger of confusing the fundamental forms of the Georgian house with its successors. As Herman put it: "Most of the purely Australian quality in early buildings stems directly from building techniques and from an understanding of the effect of climate on materials....Building technique was, as always, a predetermining factor in appearance."[5]

We see in Figure 1.8 (after Herman) how the method of framing roofs contributed fundamentally to the contrasting appearance of Georgian and modern structures:

"The Colonial builder formed a roof merely by resting heavy

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4 Macquarie was Governor of N.S.W., 1810-1821. He instituted and substantially completed a plan to provide Sydney with permanent and worthy public buildings, and was responsible for the first street plan of Hobart in 1811. His name is perpetuated in a number of places in N.S.W. and Tasmania; in Hobart by Macquarie Street and by Elizabeth (his wife's first name) street. For a definitive biography of Macquarie see M.H. Ellis: Lachlan Macquarie: his Life, Adventures, and Times, Sydney, 1947.

5 Herman's The Early Australian Architects and Their Work is an excellent reference in which the author uses many drawings instead of photographs to record buildings as they appeared before modifications were effected, frequently in ignorance of architectural design. Most of the examples are from N.S.W., but the principles which Herman sets down apply equally to the Tasmanian scene.

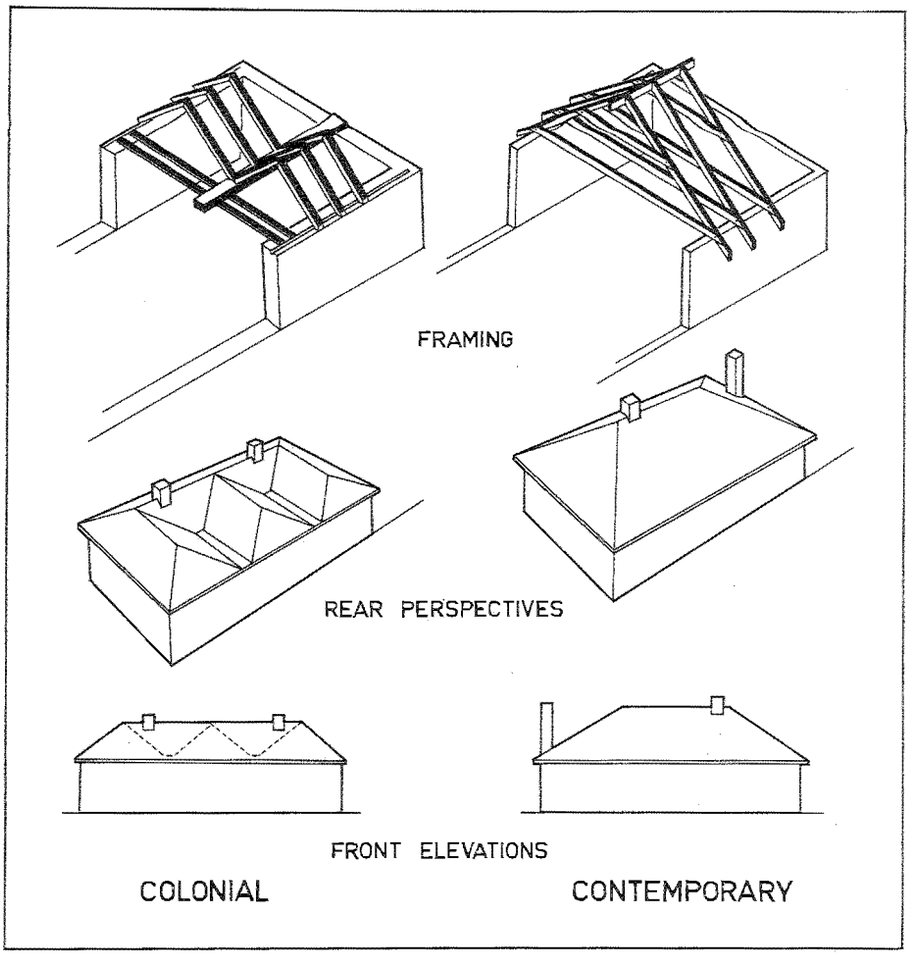

Fig. 1.8 Methods of roof construction in colonial and modern buildings (after Morton Herman).

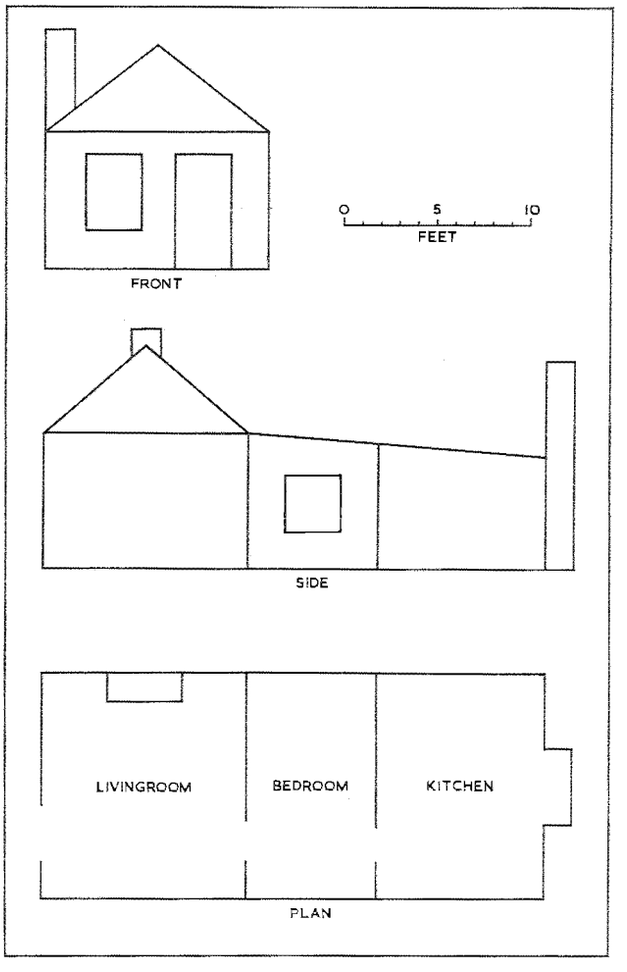

Fig. 1.9 One of the smaller dwellings of colonial Hobart, 283 Murray Street (formerly Veterans' Row). North Hobart. Demolished, with its twin, June 1966.

rafters against each other on top of the walls; the ceiling joists rested on the walls or on beams between the walls. Because of their weight, such rafters would tend to spread apart at their lower ends pushing the walls over in the process, and the cure taken was to make the walls so thick that their mass would resist this thrust. The modern technique is to use the ceiling joists to tie the lower ends of the rafters together; this prevents spreading, so that the walls can be quite thin."[6]

The need for simple roof construction dictated the standard rectangular plan of the buildings; and "the combination of rectangular plan, small-span roofs, and symmetrically grouped chimneys is the hall-mark of Australian Georgian architecture."[7]

House Units

At the very simplest, the residents of Sprent's Hobart occupied two kinds of house: large and small. Examination of Sprent's plans, even at the scale of Figure 1.3, shows the relatively frequent occurrence of small buildings. The house depicted in Figures 1.9 and 1.10, until its demolition in 1966 (by the Education Department for school extensions), was one of the smallest of Hobart's extant colonial cottages. It was significantly narrower than the typical Georgian cottage of one room and window on each side of the central doorway (Figure 1.5). Nevertheless, there were almost certainly many more of its size, if not exactly its plan, in Hobart of the 1840s than now remain.

This cottage possessed no hall, and progress toward the rear was through successively narrower doorways, from 30 inches at the front to 27 inches between living and bed-rooms and 20 inches at the kitchen. The first and middle rooms were of brick, but only the main room was under the pitched roof, allowing a horizontal lath and plaster ceiling 7'3" above the floor. The timber kitchen under a skillion roof may have been an afterthought, but alternatively it may have served as a working

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6 Herman: op. cit., footnote 10, pp. 121-2

7 Herman: Ibid.

Fig. 1.10 Two perspectives of the cottage in Figure 1.9 in course of demolition. Note plastered brick, timber lean-to kitchen area.

base from which to construct the more substantial forward rooms, a procedure which was again in vogue after World War II. Curr (10) referred in 1824 to the practice of persons of small means building "a skilling or lean-to, (which composes the rear of his future house,) - and as his means improve he erects a front."[8] In the valuation lists of 1847 a few of these first-stage dwellings are recorded, indicating the continuation of the practice into the 1840s at least.

The house illustrated in Figures 1.11 and 1.12 can be regarded as more representative of the smaller Georgian houses of colonial Hobart, and closer to the size envisaged by Macquarie (11). Whereas the tiny cottage of Figures 1.9 and 1.10 had a ground plan of about 12 feet by 28, this measured 22 x 17 for its main ground-floor rooms. Macquarie's orders relating to the size of allotments[9] assumed one-storey houses 36 x 14 feet and two-storey houses 40 x 16. While houses can be found that approximate these dimensions, frontages were usually shorter, even for rectangular plans; and many plans were square, thereby needing less allotment width than rectangular houses with the long side facing the street, and closely resembling the Sydney cottages of four rooms in a 30-foot square, plus detached kitchen at the rear, described by Boyd.[10]

The most striking attribute of the cottage now under consideration was its two upstairs rooms under a roof not markedly pitched. Access was by means of a staircase only two feet wide and the relation of the two rooms to it and to one another is indicated in Figure 1.11. From the front elevation the existence of the upper rooms was unsuspected, though from the rear a dormer window with opening about 3'0" x 2'3" and a smaller skylight marked the use of the under-roof space. The house thus had five main rooms and a store in its brick section, with a timber kitchen and store behind; altogether a fairly substantial living space for a house of small frontage and modest external appearance. It is not known what proportion of dwellings after this pattern lacked the

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8 E. Curr: An Account of the Colony of Van Diemen's Land, pp.8-9

9 Historical Records of Australia, Series 3, 1, p. 512

10 R. Boyd: op. cit., p. 21

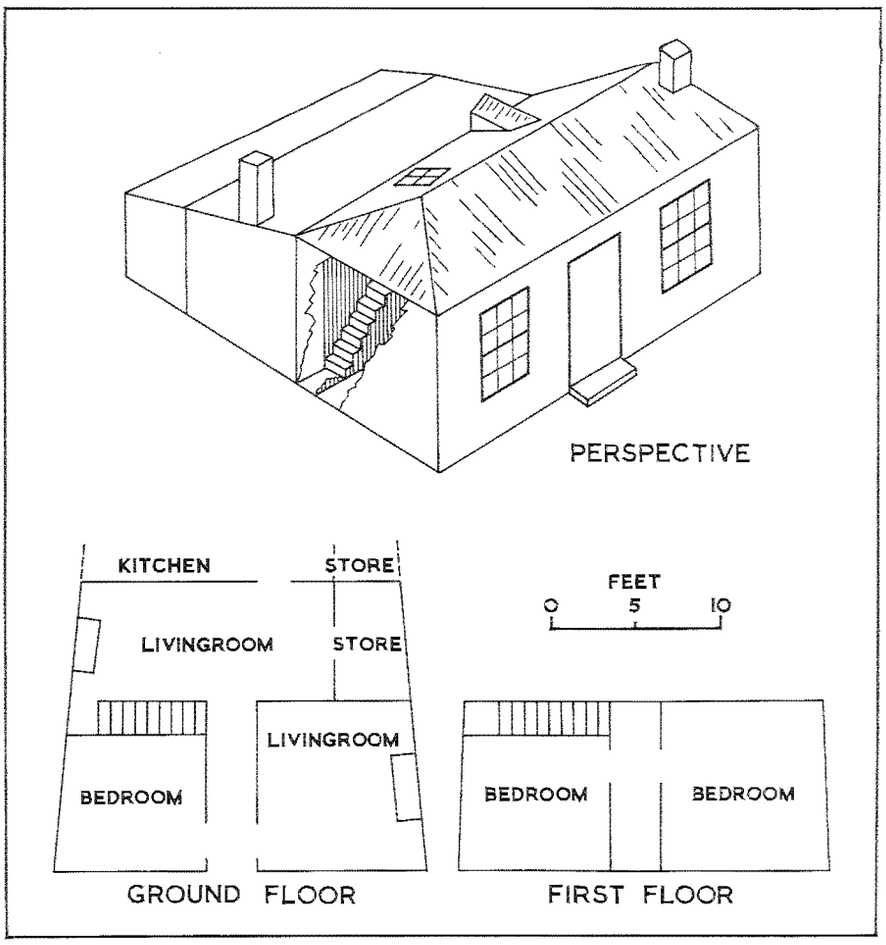

Fig. 1.11 Plan and elevation of more typically-sized colonial cottage, Murray Street, North Hobart. Two attic bedrooms not apparent from street.

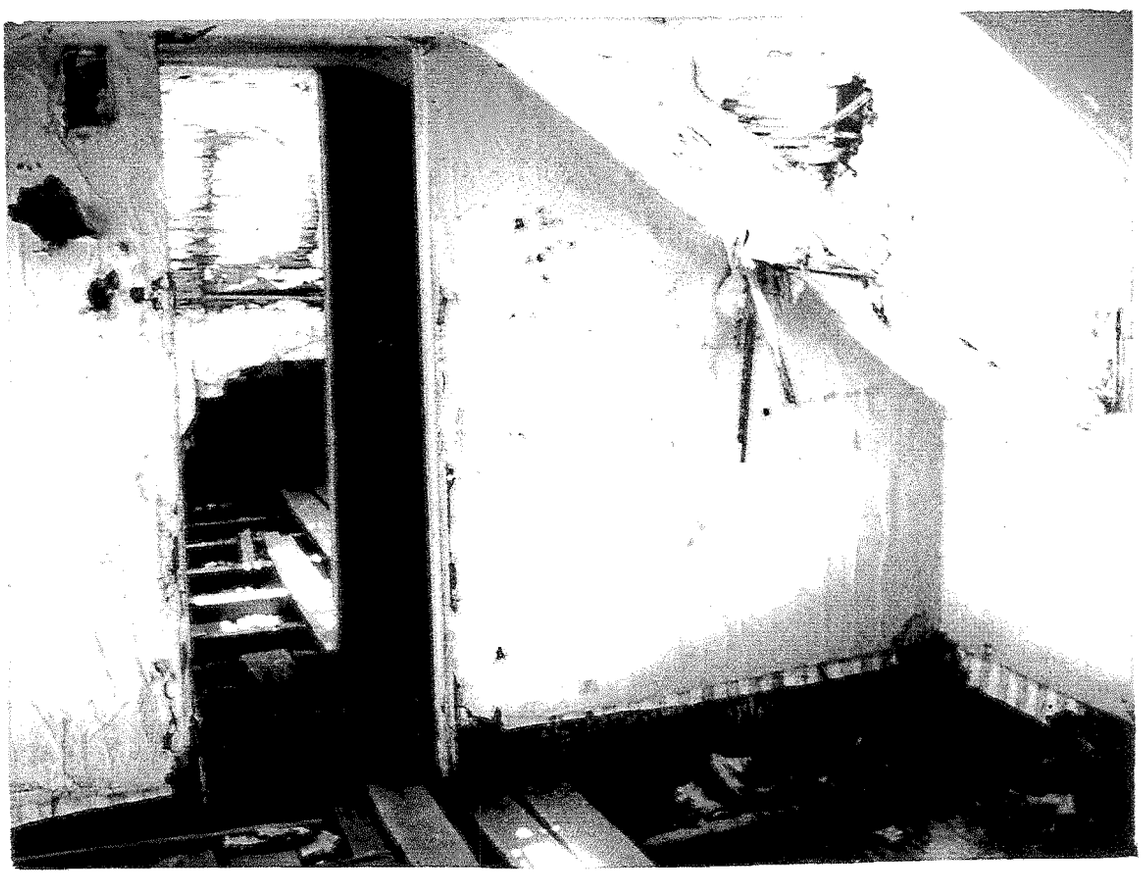

Fig. 1.12 Attic rooms of above cottage under demolition January, 1967. Lath and plaster walls, papered. Narrow stairway access between the two rooms.

upstairs bedrooms, but many did, and were therefore considerably more restricted as quarters for families of six or seven people.

Two-storey houses were sometimes very substantial structures in colonial Hobart, carrying valuations and commanding rents up to several times those of the standard cottages. The house in Figure 1.7, now preserved as a Folk Museum, epitomises the elegance of the rectangular two-storey Georgian dwelling of about 10 rooms. The two in Figure 1.13 are variants: the square plan on the left carries a steeply pitched roof providing usable attic space, as the dormer windows indicate; that on the right is comprised of a first section of approximately 2:1 width/depth proportion covered by a single pitch, but followed by a long skillion roof over the deep rear section. Often the square-plan Georgian house required a double-pitched roof to minimise the outward thrust on the walls, and this solution was more usual in two-storey buildings than the skillion. The rear perspective in Figure 1.8 shows a multiple roof line as sometimes found in the large colonial buildings.

In addition to the two main residential components of large (two-storey) and small (one-storey) houses, a third distinctive element of the colonial scene was the row house or terrace. There is no obvious reason why this common form of construction should not have been introduced from England along with the Georgian style, except that in the early stages of settlement land was readily available and individuals seem to have preferred to use it for single detached houses. The higher living density of terrace housing implies economies of land and construction, presumably associated in colonial Hobart with property investment and commercial rental developments rather than with any pressure on urban land resources. Mrs. Prinsep (12) noted in 1833 that "rows are even starting up here and there",[11] but the present writer has not found any precise observations or statistics as to the total number of terraces. The attenuated plans of some of Sprent's buildings are suggestive of rows but, in the absence of internal subdivision

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11 A. Prinsep: The Journal of a Voyage from Calcutta to Van Diemen's Land, p. 60

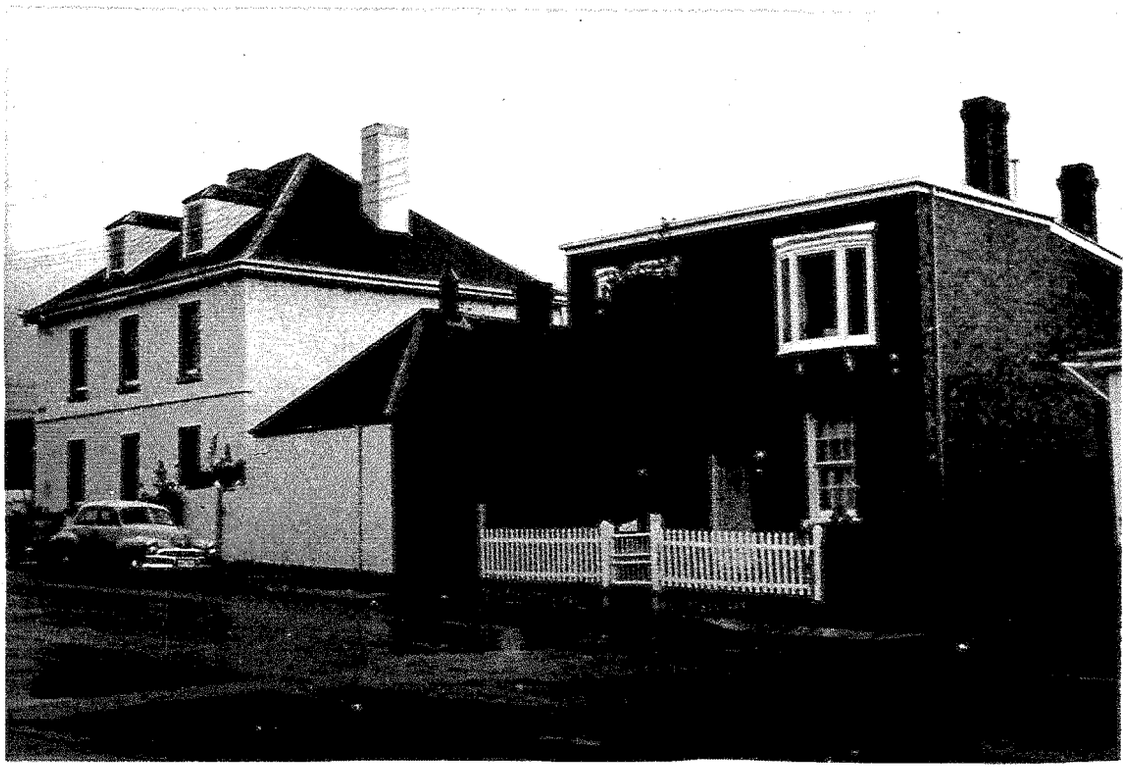

Fig. 1.13 Two-storey houses of colonial origin, Davey Street, South Hobart, 1963. That on the left is typical of Hobart's larger Georgian buildings. The upper bay windows and second-storey skillion roof on the right are unusual. These houses were highly rated at £70 and £50 in the 1847 valuation. Demolished 1965 for construction of a service station on the corner of Davey and Antill Streets.

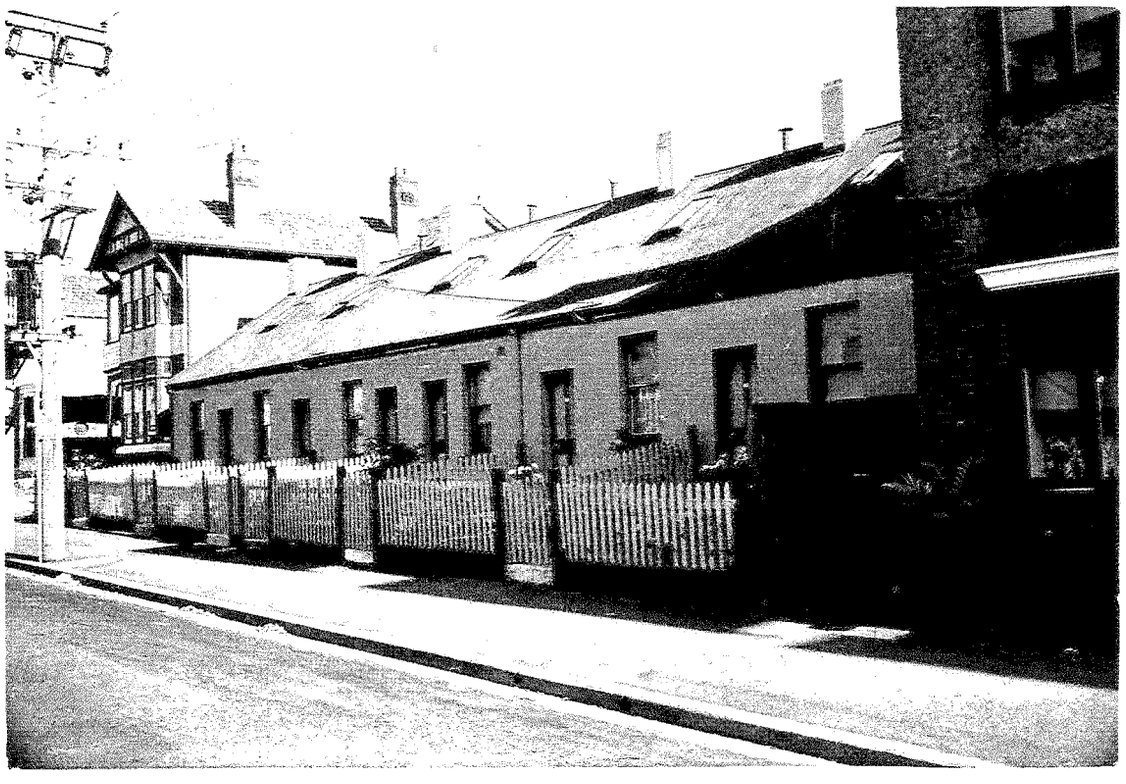

Fig. 1.14 Row houses, Davey Street, South Hobart, 1963. Few of this residential form remain in the 1960s. In 1847 four of the six units were rated at £14, the two in the middle (with doors adjacent) together at £28. A second row of six units then adjoined this building on the left.

on the plans and now of some of the buildings themselves, not conclusive. The coincidence of a series of identical valuations with a likely shape is considered adequate supporting evidence, in a few cases actually confirmed by designations such as "Moodie's Row". On this basis more than a dozen rows of four or more units have been identified, distributed widely through the urban area but with rather a concentration in the inner blocks north and east of Murray Street. An example of the few surviving rows or terraces is illustrated in Figure 1.14.

Business and Public Buildings

Non-residential buildings have not provided the same repetitive combinations of basic structural elements that marked the occurrence of the Georgian house and that in their counterparts elsewhere have become "diagnostic agents in cultural studies"[12] conducted by Spencer, Kniffen and others (13, 14, 15). No other single function was so numerously represented in colonial Hobart as the residential, and few of the centrally placed early commercial premises have survived. Nevertheless, those relics in the present scene and illustrations of structures no longer extant indicate that the shops of the colonial period characteristically were modified versions of the house. The main external difference was the enlarged, many-paned window arrangement (Figure 1.15), sometimes around a corner entrance. The common combination of commercial and residential functions under one roof could require as little change in the standard house plan as the conversion to business use of the front room on the ground floor (Figure 1.16). By arranging a simple physical barrier between the two adjacent functional areas, lock-up business premises could be provided.

Thus the small shops of the colonial period, though numerous enough in the urban core, made no striking impact upon the basically residential townscape. Such was not the case with some wholly non-residential buildings, which despite the much smaller vertical scale

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12 J.E. Spencer: House types of southern Utah, Geogr. Rev., 35, 1945, p. 444

Fig. 1.15 Commercial premises, Liverpool Street, 1870. Note twenty-five-pane windows of Mather's shop. Upper residential storey with stone facade (Tasmanian Museum collection).

Fig. 1.16 Two-storey shop-and-residence row, Liverpool Street, 1968. Modified ground floor, unmodified upper floor.

Fig. 1.17 Row of stone warehouses, Salamanca Place, 1963. Central tiers of timber doorways for goods access. Built late 1830s with convict labour.

Fig. 1.18 Warehouses East Circular Quay, Sydney, 1966. Central loading bays as in Hobart warehouses above.

differential than for some of their modern equivalents, lent variety and distinction to the scene. There was and still is a notable concentration of these buildings in the vicinity of Hobart's compact port area. Perhaps best known is the row of stone warehouses in Salamanca Place built with the aid of convict labour from the end of the 1830s. A distinctive feature was the tier of timber-faced loading bays in the centre of the three-storey stone units (Figure 1.17). Somewhat similar structures are now all but removed from Sydney's East Circular Quay (Figure 1.18). On the opposite (north) shore of the port of Hobart other colonial warehouses more nearly approximated the form of large Georgian houses.

Seaward of the Salamanca row a fine pair of Government Ordnance Stores has been a landmark in stone since the 1830s. Their designer, John Lee Archer, intended them to be joined to form one grand unit.[13] This was not carried out, though an extra storey was added to the southern building after 1890 (Figure 1.19). Nearer the commercial core, at the head of New (now Prince's) Wharf, the same architect's Custom (now Parliament) House stretched a degree more luxuriantly, its ground floor arcades with their "wide stone jambs casting deep shadows" resembling those of the Ordnance Stores designed a year earlier (Figure 1.20).

John Lee Archer was no mean architect and several other of the noteworthy buildings in the colonial town were his. While his total contribution is assessed elsewhere (4), attention should be drawn to the buildings in the military barracks complex which still stand, including the verandahed Subalterns' Quarters designed in 1828 (Figure 1.21) and the Canteen building, almost indistinguishable externally from a Georgian house (Figure 1.22). This cannot be so with churches, the quite different form of which draws on a wealth of tradition without great stylistic consistency, making generalisations about diagnostic elements

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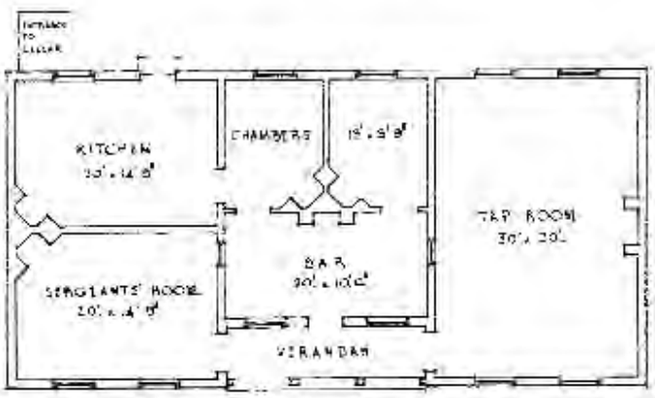
13 R. Smith: John Lee Archer, pp. 24-25, 30

Fig. 1.19 Ordnance Stores, New Wharf, 1890. Built 1834-38 to John Lee Archer's design. Central and terminal pavilions designed to join and enrich these two buildings were not constructed. (Tasmanian Museum collection)

Fig. 1.20 Parliament House between Murray Street and Salamanca Place, 1963. Built to Lee Archer's design as the Custom House, 1835-1841. Widely spaced windows, strong arches and rusticated masonry of the lower storey are noteworthy. Slate roof replaced by tiles *circa* 1958.

Fig. 1.21 Subalterns' Quarters, Anglesea Barracks, 1962. Built to Lee Archer's 1828 design. (Roy Smith photograph)

FRONT ELEVATION.



GROUND PLAN

Fig. 1.22 Barracks canteen, designed in Archer's Engineer's Office, 1834, with external resemblance to a large Georgian cottage. Used in the mid-twentieth century as the Weather Bureau (after Roy Smith).

in relation to particular periods unreliable.[14] Fortunately this kind of structure occurs so much less frequently than houses that investigation of individual origins becomes practicable. It may also be necessary, in considering townscape composition, for churches often occupy prominent sites, are frequently surrounded by open space, and stand above the general residential roof line except in high-rise areas. Their contribution to townscape is thus significant, if somewhat individual.

Trinity Church on its North Hobart hill site typifies the prominently located public building (Figure 1.24), though St. George's Church on Battery Point was no less noticeable in colonial Hobart (Figure 1.23). The Penitentiary Chapel, on the other hand, made its impact on more strictly architectural grounds, proximity to the gaol compound notwithstanding (Figure 1.25). Other churches, including St. David's and St. Joseph's in Macquarie Street and St. Andrew's in Bathurst Street, made (and continue to make) notable contributions to the appearance of the town.

Building Materials

Although Hobart's earliest buildings were of primitive construction and rude materials, the town of 1847 had achieved a considerable aura of permanence. Prinsep reported that in 1819 the gaol house was the only brick building and that freestone was coming into use. Governor Macquarie's instruction (following his 1811 visit) that new buildings should be of stone or brick doubtless reinforced if not promoted a developing attitude of continuity and permanence, and by 1829 more than 40 percent of the buildings, including nearly all the public buildings, were of brick or stone. By the census of 1841 over 71 percent of the 2,350 houses were similarly composed, representing a rapid decline of timber use. Scott (16) has examined this aspect of Hobart's evolution and Appendix IX follows his portrayal of building materials in the eight parishes of the built-up area in 1841.

Brick undoubtedly outnumbered stone at all times, although the

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14 The somewhat haphazard use of Classical and Gothic Revival styles through the nineteenth century is the basis of unpredictability.

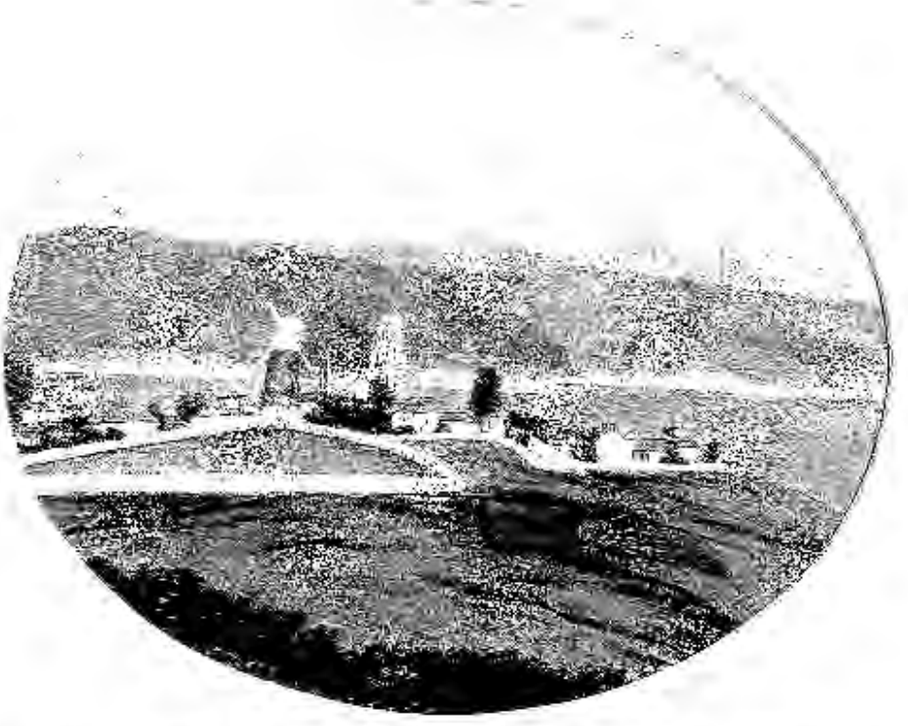

Fig. 1.23 Battery Point with the red mill and St. George's Church, from the west, *circa* 1843. The view extends to Kangaroo Bluff across the Derwent estuary. The removal of the mill in 1885 left St. George's tower in sole domination of this townscape until the erection of a high-rise home-unit block to seaward in 1967. [From a watercolour by Allen Burgess, in the collection of Dr. C. Craig].

Fig. 1.24 North Hobart townscape north of Warwick Street and Trinity Church (left), westward from the Domain. Date unknown; probably late nineteenth century.

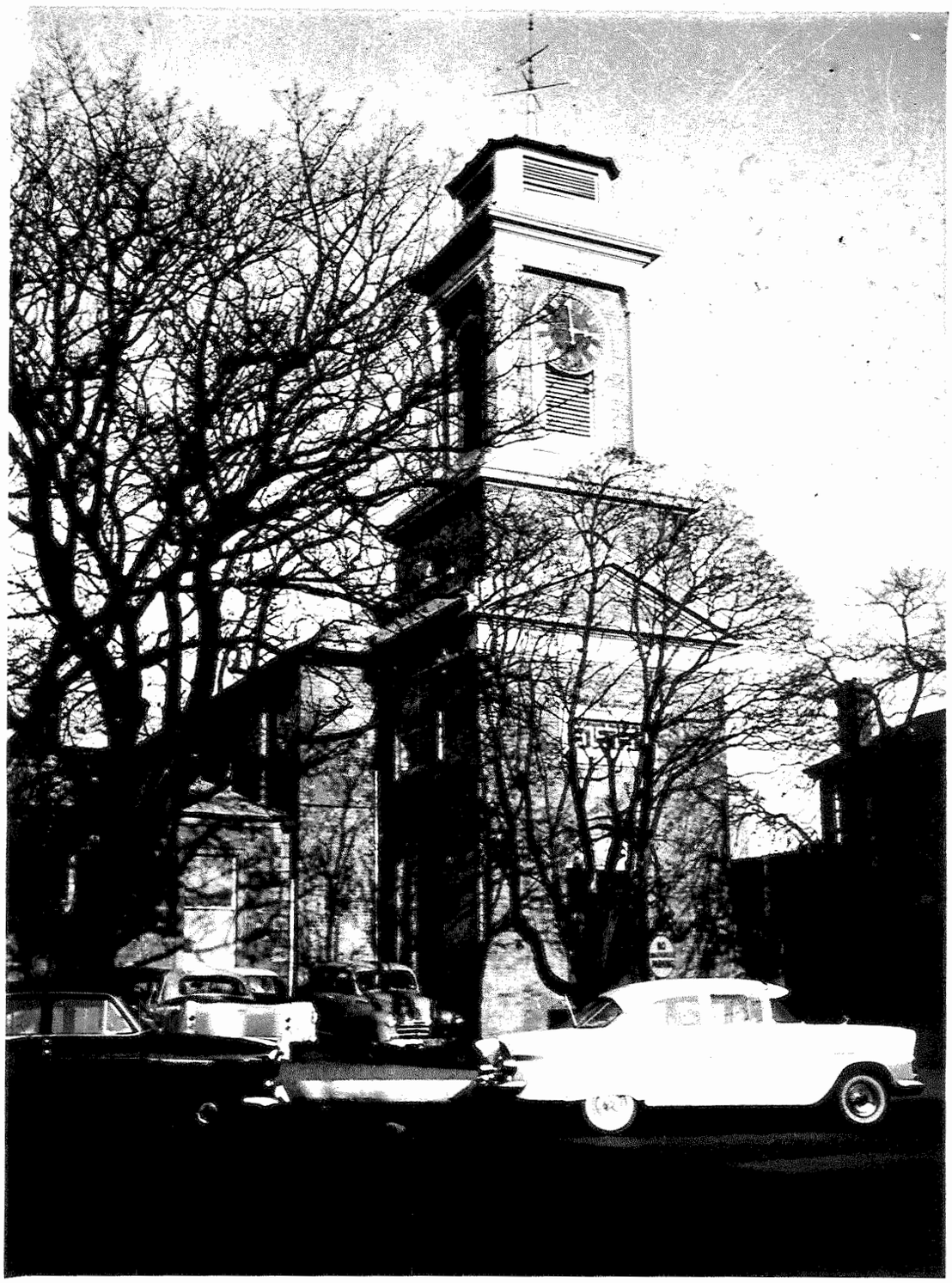

Fig. 1.25 Penitentiary Chapel (Old Trinity),Brisbane and Campbell Streets, 1963. Built in brick to Archer's design, 1831-34; used as Criminal Court since 1860. The tower is "among the best of the colonial work carried out in Australia in the nineteenth century" (Smith, p. 13).

extensive use of stone in the finer public buildings of the 1830s and 1840s is noteworthy. The distinctive red-orange 'convict' bricks were smaller than the modern 9" x 4 1/2" x 3" standard, although that was arrived at in 1625 (17). Size and hue make the early bricks readily recognizable, but their durability is much reduced by abnormal exposure, as from the removal of protective roofing. In such circumstances the mortar proves more resistant than the bricks. Sometimes a basically brick building was given a more distinctive appearance by the addition of a sandstone facade (Figure 1.7), but the practice does not appear to have been very common.

Hardly any examples of the early wooden shingle roofs remain, and even in rural areas of Tasmania they are now few. Slates were a much more widely distributed roofing material in mid-nineteenth century Hobart than their present distribution would suggest, for not only have numerous colonial buildings been demolished but some of those still extant have been re-roofed in tiles or corrugated iron, usually reducing their aesthetic appeal. Parliament House is a case in point (Figure 1.20). It is not safe, however, to assume that all colonial buildings now carrying iron roofs have had their slates or shingles replaced, for roofing iron was introduced quite consistently during the early decades of settlement (18) and some at least of the illustrations of colonial Hobart show that the material was put to use.

Examination of numerous buildings under demolition suggests that lath and plaster saw widespread use in ceilings and interior walls. The further use of timber in flooring, stairways, doors, and in roof, door, and window framing represented a significant area of demand even though weatherboard had become less popular than brick and stone as an external structural material.

Townscape Components

It is possible at this stage, without detailed recourse to functional influences (examined in Chapter 3), to outline the major areal components of Hobart Town's colonial fabric. Its physical extent has already received attention.

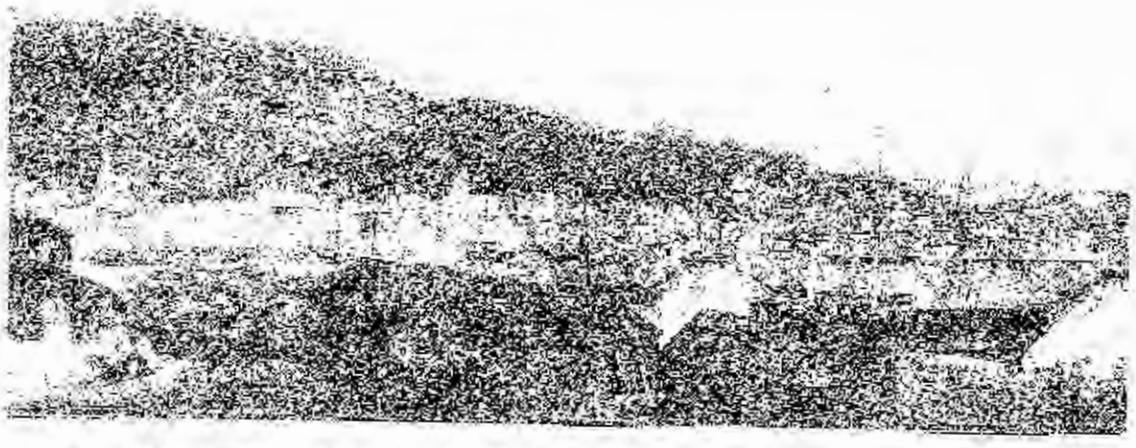

Fig. 2.26 Rubary Town from new wharf circa 1845. Note the wooden, shingle-roof huts on the wharf apron, oil barrels and the old barrel beyond. Murray Street runs down to Franklin Wharf to the right of the Custom House near the centre of the view. Elizabeth Street has yet to be extended to the waterfront (Detail section of painting owned by the Tasmanian Club).

Fig. 2.27 Sullivan Cove environs circa 1842. Reclamation and land formation proceeding on the western shore. Line of warehouses fallen the causeway to Sorrar Hobart's Island. Dwelling houses in Lower Murray Street at left. (Engraving by Lee, in collection of Dr. C. Craig)

Townscape depends to an appreciable degree upon the receptivity of the viewer and upon his vantage point(s). This amounts to a question of scale: is the viewer in immediate confrontation with individual buildings and precincts at pavement level, or is he looking over the roof- and tree-tops to areas beyond? The longer view is more likely to be influenced by land surface configuration and the general usage of fairly substantial areas; the nearer aspect depends upon details of building style and, at most, street character.

To recapture the dominant or at least differential townscape features of 1847 requires more than an assessment of present composition and components in the manner of Lynch (19), although something akin to that will be undertaken for the Hobart of to-day. Contemporary recorders of the earlier scene must be and are drawn upon to give the reader some 'feel' and visualisation of the colonial town and its more distinctive parts. It is not the intention, however, nor is it possible to parallel Fowles' contemporary elevations of both sides of Sydney's major streets in 1848 (20).

Of all the landmarks and impediments in mid-nineteenth century Hobart, the junction of land and water was probably the zone of greatest interest. The colony relied heavily on its shipping, the public buildings were mostly aligned to the shore, and there was sufficient open space for general circulation and appreciation of the buildings and facilities. An indication of these attributes is given by Figures 1.26 and 1.27. Backing the New Wharf, Battery Point was already in close association with the activities of the port, although it was far from fully occupied residentially. It offered two particular contributions to Hobart's townscape: on the ridge of the point stood the twin architectural attractions of St. George's Church and the red mill, prominent landmarks from the water and hardly less so from the west (Figures 1.28, 1.23); and down near sea level the stonework of the Ordnance stores (Figure 1.28) and the Salamanca Place warehouses backing New Wharf (Figure 1.17) made a severe but homogeneous margin of the district.

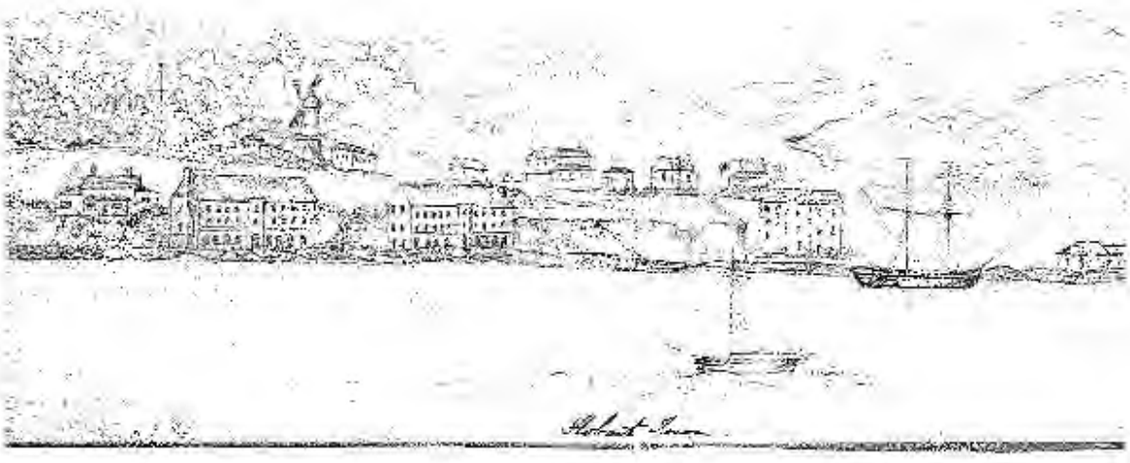

Fig. 1.28 Battery Point with mill, behind the Ordnance Stores seaward of the developing New Wharf. St. George's Church not built, thus *circa* 1840. (Sketch in collection of Dr. C. Craig)

Fig. 1.29 Hobart Town and its busy harbour from Knocklofty, 1840. Note the steam ferry at the entrance of Kangaroo Bay (left of centre) and (right) the Sandy Bay farms. (Drawing by Le Breton on Dumont D'Urville's second voyage, in Dr. C. Craig's collection)

Behind the line of public buildings ringing the port the commercial core between Macquarie and Liverpool, Harrington and Argyle Streets formed a distinctive section of the total townscape. The distinction stemmed from the composition of buildings, mainly shop- and-residence combinations, rather than from elevation and the long view. The centre, in fact most of the town, could be looked down upon from the hilly margins of Knocklofty or the Domain (Figure 1.29). Not many street views of the 1840s are available, but Elizabeth Street, the main business thoroughfare, and Macquarie Street, along which several of the leading public buildings were located, are shown in 1847-1850 (Figures 1.30, 1.31). Above and below the section of Macquarie Street illustrated in Figure 1.31 were two contrasting townscapes which cannot be pictured here. Westward, a number of very good residences provided what may be assumed to have seemed an almost genteel neighbourhood (muddy street apart), while to the east, in lower Macquarie Street, a number of low value residences including row houses mingled with several hotels and small manufactories between the wharves and the mouth of the rivulet. Surprisingly, the rivulet, which must have constituted a distinctive (in fact, unique) feature of the townscape and had to be bridged for north-south movement, commanded little if any attention from the artists and later photographers of the settlement. Perhaps the rivulet's use as a receptacle for refuse was too much for the sensitive artists to bear, though many a murky stream or canal has provided the focus for records of settlements elsewhere.

Away from the foci of maritime and commercial life the townscape components can be generalised to four or five. The Military Barracks and Trinity Church were prominent features, particularly from the southeast, owing to their elevated sites. The prisoners' barracks in Campbell Street at the northern corner of the commercial centre made a block-long barrier to normally broken residential perspectives. The largely residential tract running from west of the Barracks to west of Trinity hill and beyond need not be differentiated for the present purpose, though it will be for others. Urban occupance became very disseminated in the foothills of Knocklofty, but in the Sandy Bay vicinity to the south it gave way to rural dwellings. The Sandy Bay

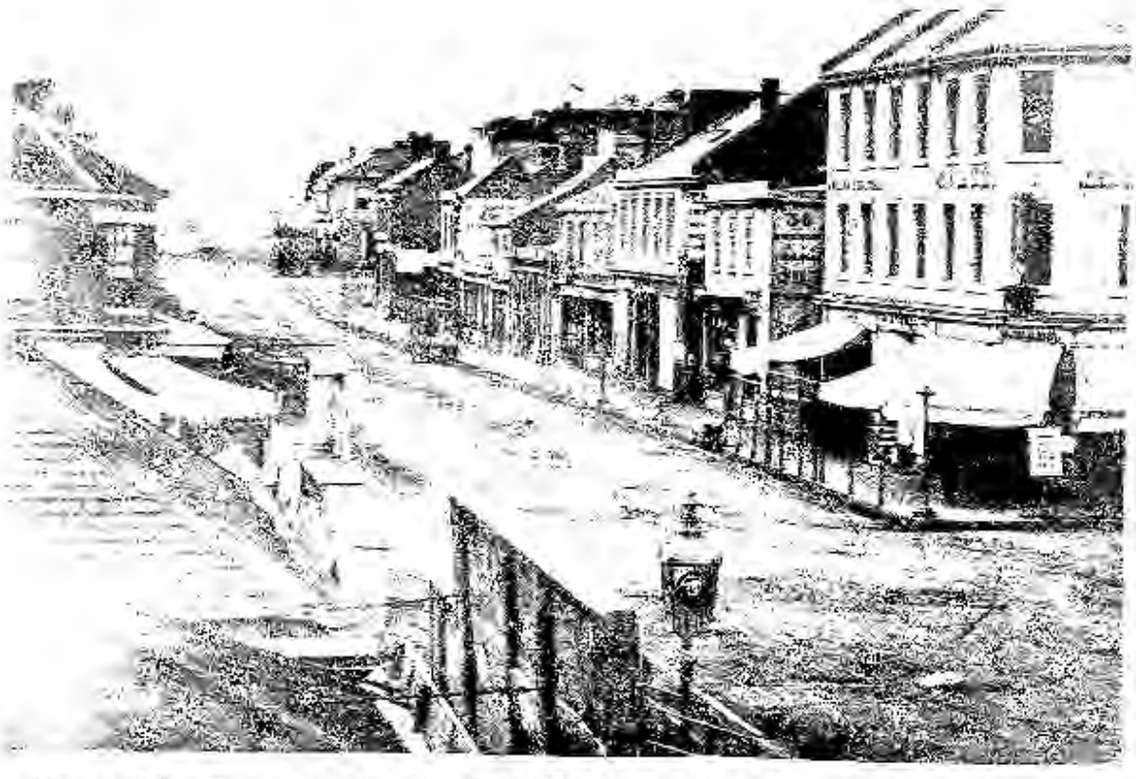

Fig. 1.30 The seaward end of Elizabeth Street 1850, between Liverpool and Collins Streets. (Tasmanian Museum collection)

Fig. 1.31 Macquarie Street, north side, westward from the Guard House at the corner of Elizabeth Street. 1847. (Tasmanian Museum collection)

Farms were the rural-urban fringe of mid-nineteenth century Hobart (Figure 1.29 and Appendix X). Further up the valley of the Hobart Town rivulet the Core Street mill stood at the margin of the town land, so that the female house of correction and the Cascade brewery beyond were landscape rather than townscape elements.

New Town, to the north, was a village not yet linked by contiguity of settlement to the port town, while Kangaroo Point shared only the river and the ferry which crossed it from Sullivan Cove (Figure 1.29).

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(20) J. Fowles: Sydney in 1848, Sydney, 1962 (facsimile edition).

Chapter 2

Property Valuations and Ownership

Informative though the record of physical distribution provided by Sprent and others may be, we need to look beneath the bricks and shingles at more abstract evidence of urban structure. Such is not always readily available for distant times, and so, bearing in mind the extent to which the scope of the historical geographer is delimited by the nature of extant records, it is the availability of the 1847 valuation of Hobart property (1) rather than the work of Hoyt (2), Firey (3) or other students of land values which is the starting point of this part of the investigation.

The Assessment Lists of 1847 constituted the first comprehensive record of Hobart property values. The names of the landlord and the occupier, the assessed annual value of the property, and the rate payable by the occupier were listed, together with the functional character of each property -- house, shop, school, etc. This was a form of record followed in its essentials for successive property valuations over the next hundred years. A serious deficiency in the 1847 and later nineteenth century lists is the absence of cross-street indications, which requires other sources of information to enable the accurate placement of individual properties within town blocks. Fortunately Sprent's survey made possible the allocation of the 1847 valuations with a good degree of confidence in most areas. One of the block plots of the valuation data is compared with Sprent's survey for the same block (Figures 2.1 and 2.2).

The total area covered by the 1847 roll is almost completely coincident with that surveyed by Sprent; which is, in fact, the settled town lands of the 1840s. Even so, there are notable data variations between the two. In some localities the owners' names on the valuation roll may duplicate the lot titles on Sprent's survey for the whole length of a block; elsewhere there may be almost no coincidence, and a great deal of searching is required to find a clue which provides the

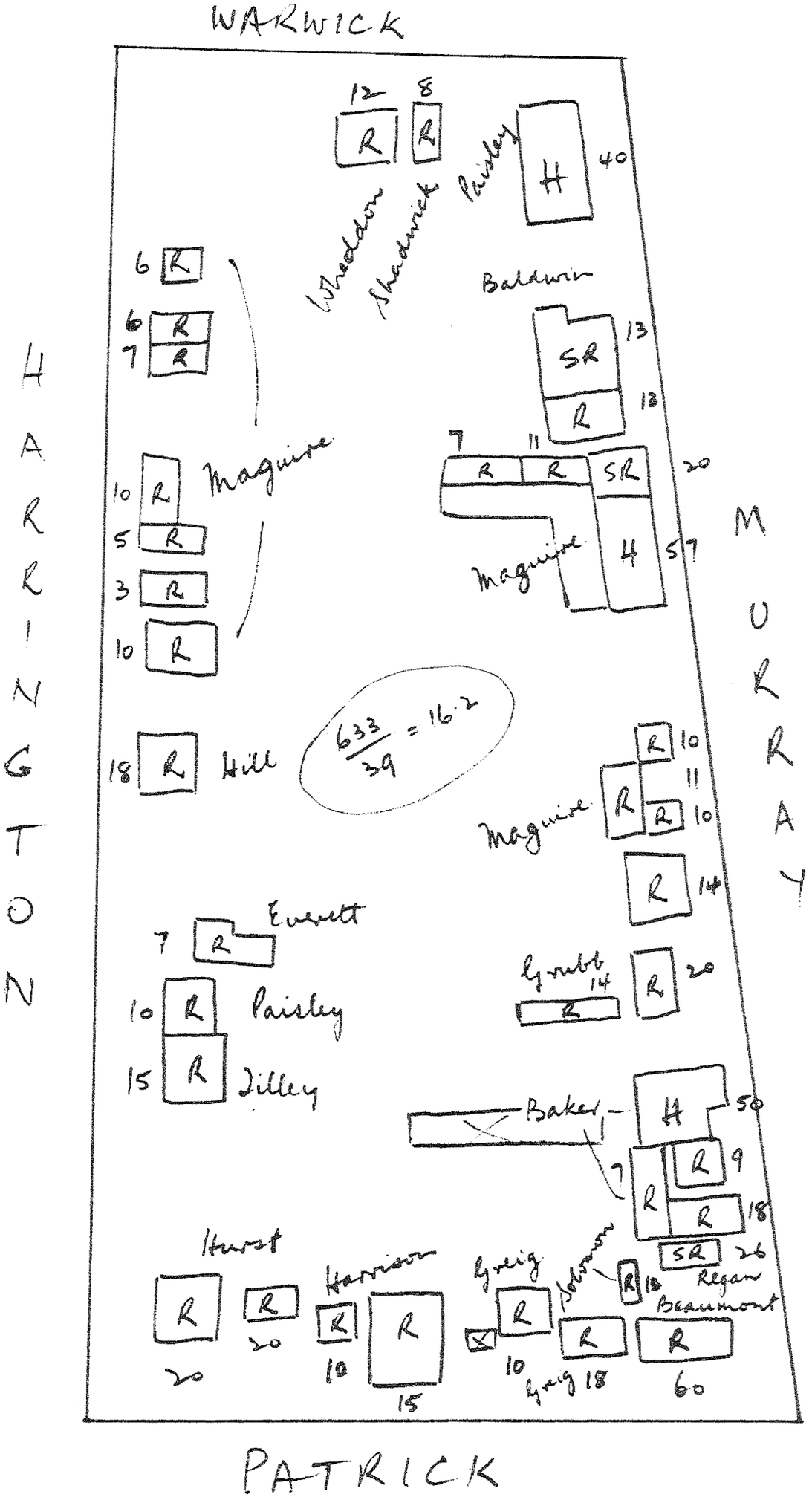

Fig. 2.1 Example of 1847 valuation data plotted for one town block (Assessment Lists, 1847)

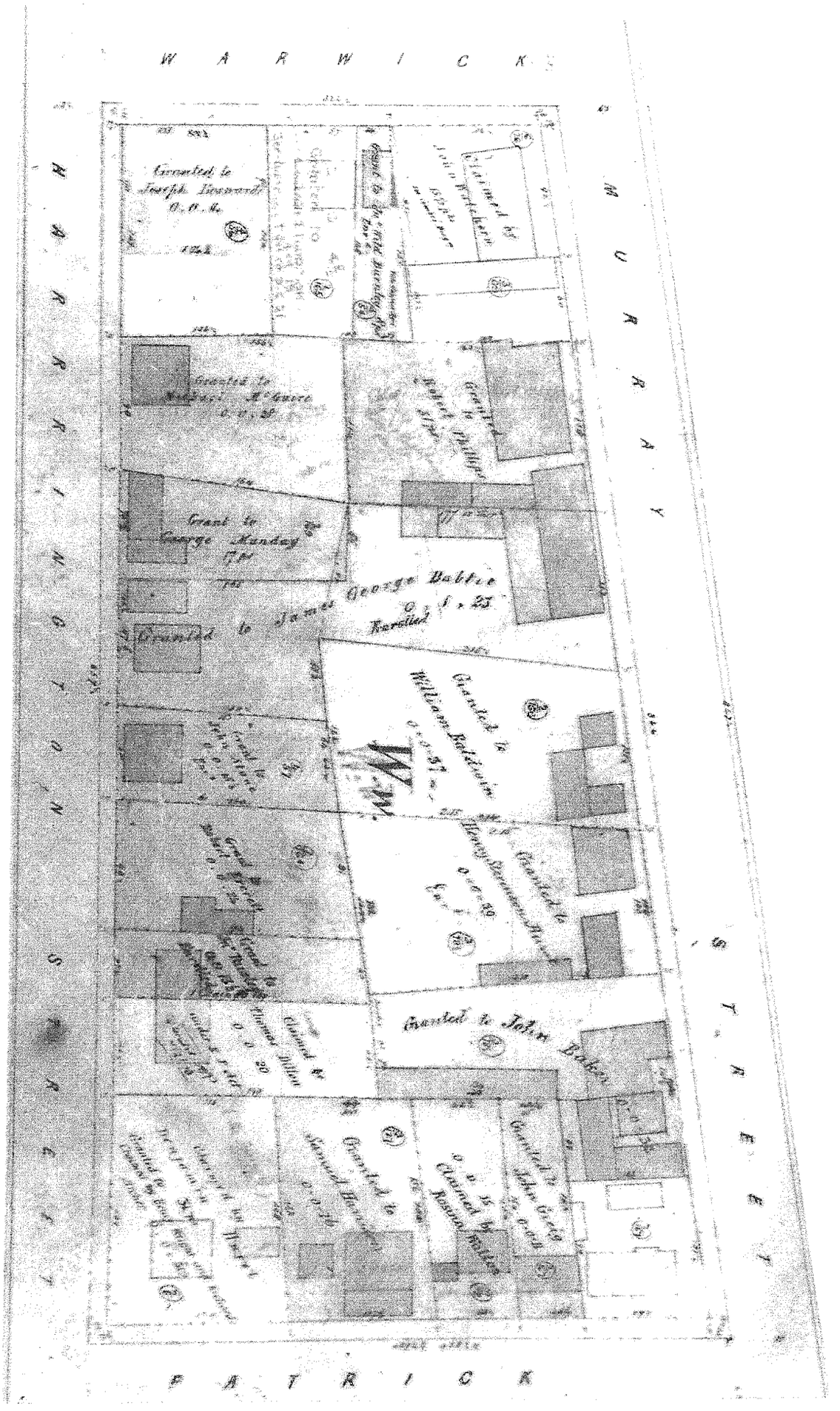

Fig. 2.2 Sprent's survey of the town block in Figure 2.1 (Plan 28, Sprent volume, Lands & Surveys Dept.)

key to a run of holdings. In other words, there was a considerable turnover in property ownership within the space of a few years up to 1847, a matter deserving of further consideration at another time.[1]

Land Values vs. Property Valuations

There is a distinction to be noted between land values and the present data. The expressions of monetary value used here are assessments of the annual (rental) values of improved property, undertaken for municipal rating purposes.[2] That such assessments are not necessarily coincident with current market values and have no specified relationship to improved capital values of the properties assessed need not cause concern if we regard internal consistency as the important requirement.[3] What does seem likely and significant is that improved capital values -- values incorporating unimproved land values -- have been less influenced by short-term fluctuations than have land values which closely reflect contemporary market conditions.

1 The correct allocation of corner properties was at times a considerable difficulty. If the survey failed to provide any coincidence of titleholders at or near adjacent corners then the valuation listings for the street could easily run on by two or three holdings into the next block, with varying effect on relative block totals and averages, and on component function averages. It is hoped that errors have been minimised, but some must inevitably remain in consequence of incomplete spatial information. Despite close examination of the survey plans and study of numerous prints, the chance publication of a hitherto unseen engraving as this chapter was being written provided cause for reassessment. The Argyle Street shop and residence of R. Lewis and Sons was shown to be on the corner of Argyle and Collins Streets (where it still stands as Red Cross House), and not two or three allotments nearer Liverpool Street as had been assessed. The hotel that had been assumed to occupy Lewis's corner was in fact on the opposite corner, on the Collins Street axis, next to a holding whose owner had the same surname as the hotel owner and which had therefore seemed correctly placed. The components of three blocks were thus slightly altered, making adjustments necessary to totals, averages and ranks for the blocks as a whole and for individual functions.

2 These gross average annual values (the assessed rental value of each property) appear to be identical with the gross value parameter recently employed by B.T. Robson: An ecological analysis of the evolution of residential areas in Sunderland (4). Robson's exposition of gross value rating as a measure of rental (his footnote 7, pp. 139-149) applies equally to the Hobart situation.

3 There must obviously be a positive correlation between the capital worth of a building and its value for rental, but the only known quantitative stipulation in the assessment procedures is that the annual value cannot be less than 4 percent of the capital value. Vacant land is normally assessed at that percentage exactly.

In particular, it would seem that land committed to a specific use by some form of building development is less susceptible to market speculation than land as yet undeveloped. Against which is the possibility of reduced improved values as a result of building in excess of demand, with consequent vacancies. In any event annual valuations of the kind used in this study have the advantage of indicating real property conditions (including the disposition of functional units) rather than the assumed marked value of land whose potential function (and hence value) may be considered more readily to differ from one period to another.

The question of what is being measured and what relation it bears to land value hypotheses is of some relevance here. Ratcliff (5) drew attention to the fact that the calculation expressing the return from land and buildings "is often erroneously referred to as land valuation" when it is "just as truly building valuation."[4] He went on to say that the land use pattern of the city is developed through "a strong tendency....for each site to be developed in its highest and best use through the competition of entrepreneurs" and that "it is impossible to separate the concept of land value from the notion of the project or enterprise". In other words it is not possible to place a value on a vacant plot of land without first assuming a use for it in some process or system of development.

It would appear, then, that while data of the kind used in this study of Hobart involve assessments of value, they are at least based on established conditions of buildings and functions, and therefore less speculative than unimproved land value which "is a function of all future returns as foreseen by prospective enterprisers" who must assume future developments.[5] Otherwise stated, the annual values employed here are related to economic rent which is "a measure of the value productivity of land when combined with other factors of production in such a way as to produce the maximum return on the combination or enterprise and thus on each of the factors, including land."[6] Capital improvement thus plays a vital part in the distributions

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4 R.U. Ratcliff: Urban Land Economics, pp. 356-7

5 Ibid., p. 360

6 Ibid., p.363

of value which will be examined. At the same time the locational characteristics of urban land, its durability, its limited supply and the relative permanence of its locational relatipnships are fundamentally important.

The Distribution of Assessed Values

The assessed annual value of all the property in the urban area of 1847 was £101,000. Its uneven distribution over 110 blocks is illustrated in Figure 2.3 (also table Appendix I). Expectedly, there was a concentration of property, mostly of high individual value, in the commercial core area. The number of buildings per block varied from one in the northwest corner to 88 in the commercial centre north of the harbour. Of the total valuation, £5,242 or 5.2 percent was in the block bounded by Elizabeth, Murray, Liverpool and Collins Streets (Figure 1.2). The six leading blocks, lying on either side of Liverpool Street between Harrington and Argyle, contained 22.6 percent of the town's total valuation (Table 2A).

Table 2A

Leading Block Proportions of Total Urban Valuation 1847

Rank	Location	Block Valuation (£)	Percentage of Urban Total
1	Elizabeth-Murray/ Liverpool-Collins	5,242	5.18
2	Elizabeth-Murray/ Bathurst-Liverpool	4,497	4.44
3	Argyle-Elizabeth/ Liverpool-Collins	3,918	3.87
4	Argyle-Elizabeth/ Bathurst-Liverpool	3,285	3.24
5	Murray-Harrington/ Liverpool-Collins	3,103	3.07
6	Murray-Harrington/ Bathurst-Liverpool	2,829	2.83
Six Blocks	Elizabeth-Harrington/ Bathurst-Collins	22,874	22.63

Source: Assessment Lists, 1847 (1)

In the light of the building developments previously discussed the location of high-ranking blocks astride the rivulet was to be expected; not so the position of the second and fourth blocks to the north of the first and third rather than south towards the water.

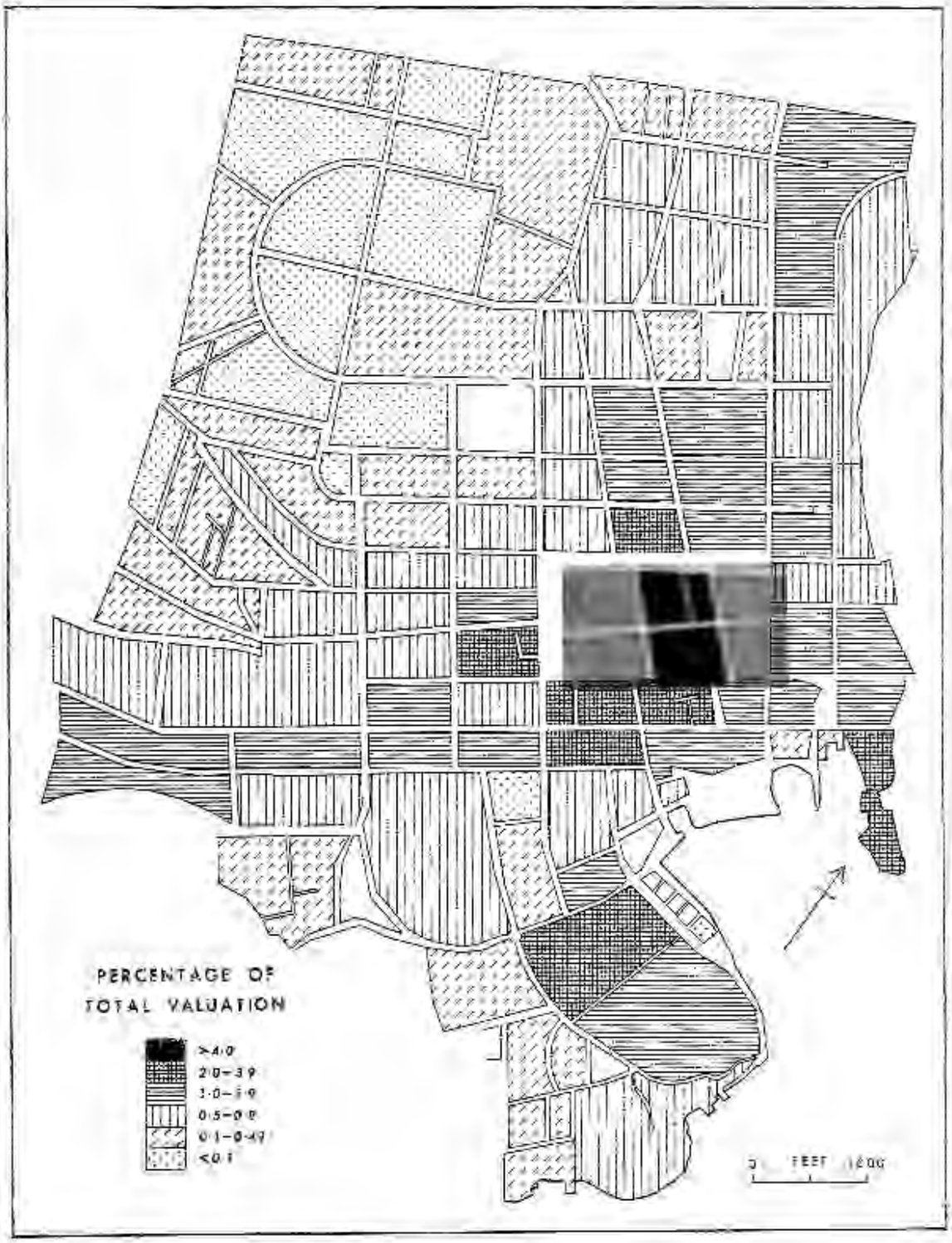

Fig. 2.3 Distribution of total urban property valuation, 1667 (from local assessment lists, 1667).

Probably the higher ground on the north was favoured above that of the down side which was more susceptible to flood. Also, though access to the port was desirable, the western shore was under reclamation with Franklin Wharf not yet completed, and in any case direct access was barred by public buildings, in particular Government House, the grounds of which ended in a cliff overlooking the harbour and blocked the extension of Elizabeth Street below Macquarie. As it was, the second, fourth, fifth and sixth ranking blocks lay between the two nearest the original settlement site and the bulk of the occupied areas to the north, west and south.

The distribution of assessed property values in sum reveals one facet of urban structure, but the unequal degree of occupance among street blocks contributes somewhat to the wide range from less than 0.1 percent of the town total to more than 5 percent. An examination of average property valuations largely removes this influence, although the average valuations of some thinly settled blocks may be less dependable guides to ultimate property conditions than those of more fully built-up inner areas (basic data -- Appendix I).

It can be seen from Figure 2.4 that the highest block averages encircled the port. These were the only areas in which the buildings received an average assessment of more than £100, and they consisted in the main of warehouses and public buildings, including Government House, the Custom House and the Treasury. Some of these were substantial stone buildings with valuations, and indeed capital values, individually superior to the commercial and residential properties of the centre and beyond. However, they tended to occupy a lesser proportion of their block area than the commercial functions, and their values averaged on a front-foot basis would be less dominant than on the present basis of improved property units consisting of land and buildings.

The criticism may be advanced that a small number of highly improved properties may unduly influence the block averages even though their effect on total valuations is less pronounced -- hence the highest average valuations around the harbour while the highest

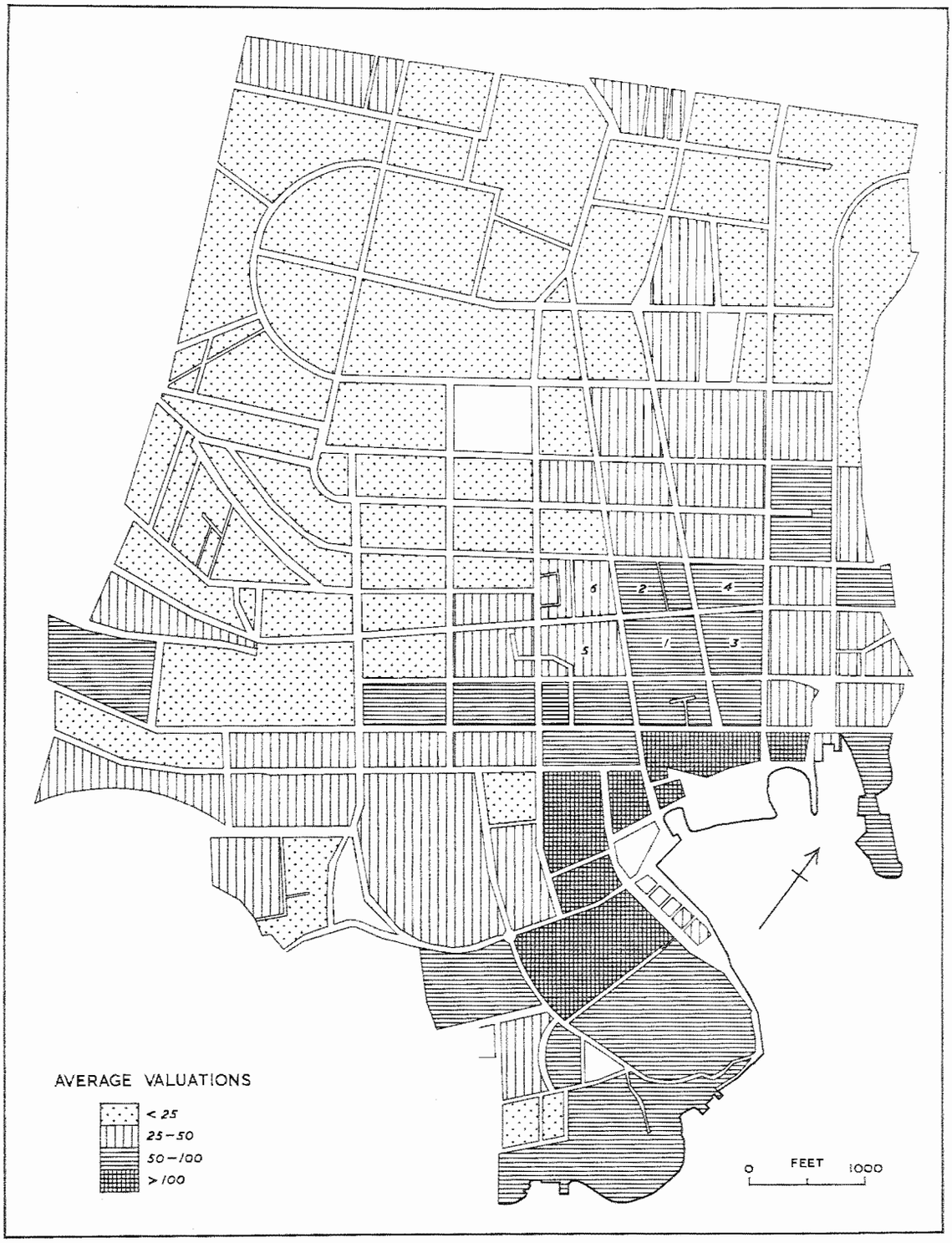

Fig. 2.4 Distribution of block average property valuations 1847, in four categories. Values in pounds (Assessment Lists, 1847).

block totals lie in the commercial core. It is submitted that such influence is not unreasonable, and that this use of the unit property measure is in fact a better guide to the nature (status) of occupancy than frontage measurements, which can have a levelling effect when higher improved values are spread over relatively larger frontages. Nevertheless, it should be pointed out that inconsistencies can occasionally arise from the nature of the valuations themselves. For example, the block containing the Hobart goal rates more highly than several adjoining blocks because the gaol consisted of a number of buildings occupying much of the block but was given a single valuation.

Consideration was given to allocating property measures to street intersection points as nodes of circulation and with a view to plotting property values by isopleths rather than choropleths. It was decided that the block entity had most claim to be the unit of access and circulation, for both vehicular and pedestrian traffic, especially in the commercial core where internal intercommunication among adjacent stores has long been a feature. There are also practical difficulties in exactly quartering property holdings around intersections. Even so, isolines were tried, since they have been used in land value mapping (6), but the results were less revealing than the technique here adopted.

The blocks in the second (£50 - £100) category are for the most part adjacent to those in the highest category. They consist particularly of the central commercial area. From this hub they extend some distance southwest between Macquarie and Collins Streets, associated with good residential buildings rather than commercial properties. At the western end of Macquarie Street one block owes its position as an outlier of relatively high value to its industrial character, for the area included two water mills and a brewery (Block 17 in Figure 2.5). This was the place where the waters of the Hobart Rivulet, descending from the slopes of Mt Wellington, made contact with the contiguous town lands.

On Battery Point the largest extent of the £50-£100 valuation category outside the commercial centre derived partly from another

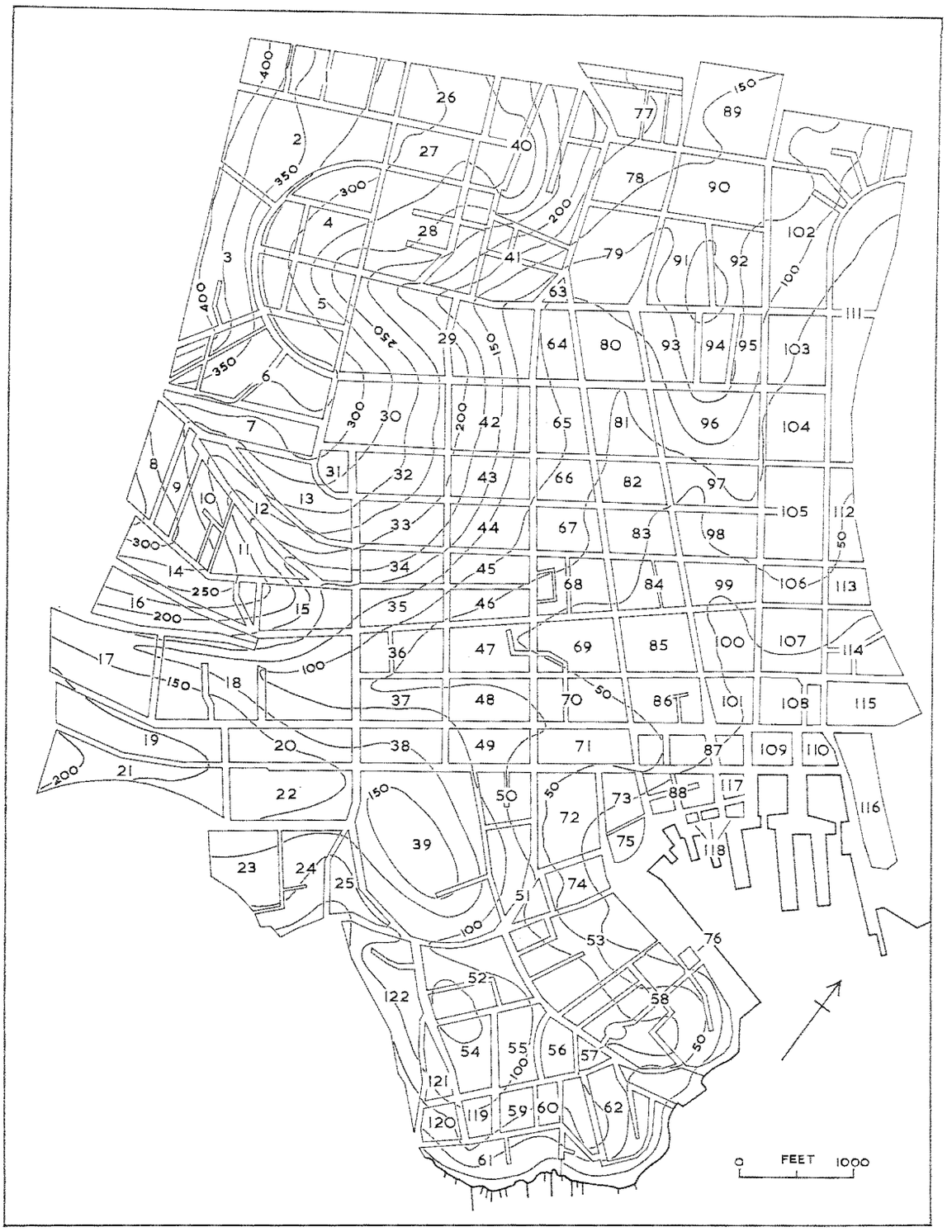

Fig. 2.5 Index to blocks for 1847 town area. The street pattern and port configuration are for 1954 to identify reclamation and completion areas included in later property assessments. Generalised contours in feet above sea level.

of Hobart's early industries, shipbuilding. A leavening of shipyards and warehouses among the residential property, some of which commanded desirable water views, was sufficient to produce high average valuations, while across the cove warehouses and shops gave the peninsula of Old Wharf similar rating to the seaward areas of Battery Point. The two blocks divided by Kelly Street north of Hampden Road owed their differential ratings (with averages of £102.6 and £51.7) to the greater representation of warehouses in the property composition of the higher block.

If in fact we rank the 110 Hobart blocks containing assessed property in 1847 by quartiles (Appendix XI), both these adjoining Battery Point areas are found in the fourth quartile, since the upper quartile value was only £47. By the same token, quartile ranking fails to differentiate as effectively among the higher value areas as the scatter-derived categories used in Figure 2.4, whereas an increase in the number of categories sufficient to bring out the higher value differentials produces too fragmentary an effect. Nevertheless the distribution of property valuation in Table 2B complements the visual pattern of Figure 2.4

Table 2B

Ranking of Block Average Property Valuations 1847

Number of blocks: 110 Range of average values : £8.8 - £500.0		Deciles	Value (£)
		9th	75.60
		8th	52.35
		7th	39.50
		6th	32.45
Quartiles	Value (£)	5th	28.35
		4th	21.65
		3rd	19.35
Upper	47.10	2nd	16.25
Median	28.35	1st	13.60
Lower	17.60		

Source: Assessment Lists, 1847

The Pattern of Lower Values

The lower category town blocks of 1847 were dominantly residential, the sequence of houses broken sporadically by shops, hotels, schools,

workshops and the like. This is more true of the sub-£25 average valuations than of the £25 - £50 category, which involved areas of more diverse character. In the group of five blocks east of the business core between Macquarie and Bathurst Streets, (Blocks 106, 107, 108, 114, 115 in Figure 2.5), three had more than half their total valuations in residential property, but several individually important functions including the hospital, the Theatre Royal, and a slaughterhouse in Sackville Street were represented, without any marked spatial differentiation. A number of shops in the same area comprised the eastern fringe of the commercial centre.

North of the highest block totals a group of nine blocks (81-83, 91, 93, 96-98, 104) shared the £25 - £50 category, all but one of them having a frontage on Elizabeth Street, which continued its commercial axial character beyond the obviously business core. However, commercial representation declined steadily northward and on the western side of Elizabeth Street the block averages fell from £44.5 between Bathurst and Melville to £26.5 between Brisbane and Patrick. On the east there was fluctuation rather than fall, with the six blocks between Bathurst and High (now Tasma) ranging from £35.9 to £29.6. In all of this zone the residential proportion of total valuation did not fall below 49 percent for any block. On the hill surmounted by Trinity Church, by no means fully occupied in 1847 but with some houses of good quality, the western slope leading to Elizabeth Street with views of Mt. Wellington was clearly more desirable than the eastern side facing the Domain, since valuations were around £30 on the west and under £20 in the east.

Trinity Hill had a somewhat superior southwestern counterpart in the vicinity of Fitzroy Place. On the ridge of land running down from Mt. Wellington and continuing eastward as the hill occupied by the military barracks and finally as the peninsula of Battery Point the Fitzroy-Davey Street area contained Hobart's best concentration of residential property, with the possible exception of some highly rated but more dispersed houses nearer the centre in and near Macquarie Street. The block bounded by Fitzroy, Davey, Molle and Antill (Block 22) averaged £48.2 per property, while the adjoining

block with a frontage on Garden Crescent (later Fitzroy Crescent) was lowest in the group west of the barracks with £35.3. In other words, the average values of this substantially residential area ranged around the upper quartile value of all Hobart's blocks of property at this time. Since the median rating was £28.35 all 50 blocks contained in the lowest valuation category of Figure 2.4 fell below it.

These lowly rated blocks comprised the bulk of the western half of the contiguously occupied area and much of the northern periphery. There is no clear-cut grouping of values within this general distribution of the sub-£25 averages, but it does appear that stage of development may have been more influential than other factors in providing such similarities and differences as occur between neighbouring blocks. This could operate in two respects: blocks subdivided or developed at the same period tend to have buildings of at least broadly similar style and value; blocks just developing have few property units from which to obtain a reliable average valuation, and those few may include temporary or primitive structures characteristic of the urban fringe. Take, for example, the two blocks on either side of Warwick Street and bounded on the west by Hill Street (Blocks 28 and 29). Their averages of £20.0 and £12.3, one well above and the other well below the lower quartile value (alternatively, in the 4th and 1st deciles), are notably discrepant. But on investigating the structure of the averages we find that the £20.0 derives from just one house, whereas the lower figure represents 36 residential and commercial properties.

This is an extreme case, but it can be seen that in partly developed areas where improved values and valuations are modest the addition of a single high-value unit such as an hotel can raise the average significantly. Thus an hotel assessed at £120 can raise the average valuation in a block of twenty £15 houses from £15 to £20, or through two deciles in 1847 terms. It is also evident that site factors such as elevation were reflected in newly developing as well as more established areas. On the high side of Lansdowne Crescent above Poet's Road (Blocks 2, 3) valuations exceeded £20, and on

the urban periphery above Hamilton Street (Block 1) reached a surprisingly high £35. Below Lansdowne Crescent the handful of houses built between Sprent's survey and the 1847 assessment (Blocks 4,5) were only of the £12 and £15 order. Associations in time and form are reflected in the small range from £16.6 to £17.2 for Blocks 30, 32 and 33, as also in averages between £14.4 and £14.8 for Blocks 43, 44 and 45.

Rates and Rents

What relation rates payable[7] bore the actual market rents has not been studied, but rents surely deserve consideration in social or economic histories of Hobart. In the present context of historical geography it can be noted that just as modern capital valuations for rating assessments tend to lie below market prices for property, so probably did earlier valuations for rates fall short of rents demanded and paid for comparable dwelling space. In the 1820s Curr (7) reported that cottages of 4-6 rooms commanded £60 - £80 per annum and that two-storey houses of 8-10 rooms brought £120 - £200.[8] Widowson (8) found house rents "very exorbitant": "a small cottage with only four rooms, and those of very contracted dimensions, and a kitchen at the back, will let for 60 to 80 pounds per annum" while "larger houses, adapted for stores, obtain from £200 to £300 per annum."[9]

True, the early 1840s were marked by economic depression and a probable excess of supply over demand in the housing field, whereas the earlier experience of Widowson and Curr related to rapid population growth coupled with no reserves of matériel. Even so, these must surely have been extreme demands for by 1841 the wages of bricklayers, carpenters and masons were only seven to eight shillings per day, which fell to a minimum of four shillings and eightpence by 1848 (9). It seems unlikely that these tradesmen could have afforded almost half their earnings in rental of small cottages. Undoubtedly some of the artisans built and owned their dwellings, and others lived in the

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7 These were 5 percent of the assessed annual value (valuation) of the property shown on the Assessment Lists.

8 E. Curr: An Account of the Colony of Van Diemen's Land, p. 9

9 H. Widowson: Present State of Van Diemen's Land, pp. 28-9

presumably cheaper-rent rows or terraces. But owners' and occupiers' names in the valuation records coincided insufficiently (see below) and row houses were too few to be confident that high rents would have been a charge only on the wealthy.

The matter of rates need not be speculative, since we know just what payment was expected of "the occupier or occupiers of such houses, warehouses, counting-houses, and shops respectively for lighting, paving, and cleansing the said City and Wards thereof for the year ending on the 24th day of September, 1847."[10] Since the charge was invariably "computed on the scale of One Shilling in the Pound upon the annual value of the premises assessed"[11] the distribution of rates would duplicate the map of valuations if taken on the same block average basis. However, some indication of the rates payable on several classes of property can be made by identifying particular listed buildings on the ground.

Thus, the small Georgian cottage shown in Figure 1.9 paid rates of 11 shillings (valuation £11), while the standard structure as in Figure 1.5 usually paid from 10 to 20 shillings. Substantial two-storey houses contributed considerably more, those in Figure 1.13 paying 70 shillings and 50 shillings. A number of houses in Macquarie Street were rated at £5 or more and others at this level were distributed sporadically elsewhere. One of the highest rates for a house was attached to that owned and occupied by Gamaliel Butler in Hampden Road: £11, which was as much as most warehouses and more than most central shops were levied. Near Butler's house were two others, including that in Figure 1.7, rated at £6, a figure which few hotels or taverns were called upon to exceed. The house owned and occupied by H. Hopkins in Elizabeth Street between Brisbane and Patrick attracted the highest rating of any private residence - £15. In fact, only three other non-government properties paid more. These were Charles Swanston's

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10 Assessment Lists, Hobart Town Gazette, 5 January 1847, p. 1 (1)

11 Ibid.

bonded store on New Wharf, £25; John Walker's mill and brewery (not, we must assume, the John Walker) in Barrack Street, £17/10/-; and the shop and house of Richard Lewis and Sons in Argyle Street (Figure 2.6) also £17/10/-.

The rates payable on the units of rows or terraces were of a much lower order than for the grander detached houses, and generally comparable with cottage levels. Locality as well as structure doubtless played its part, though the relative contributions of the two cannot be properly assessed at this distance. Indicative are the well-built row in Davey Street just beyond Antill shown in Figure 1.14, rated at 14 shillings per dwelling unit; and a four-unit row in Church Street, now less well preserved than the former, but rated at £1 each, compared with £1/10/- for James Sprent's own house along the street near the Trinity Church. A number of rows and presumed semi-detached houses, particularly in the outer occupied areas of North and West Hobart paid eight, seven, six and even five shillings rates. There were in addition several single ratings of three and four shillings. None of these has been identifiable as still extant, and it must be assumed that their low rates were associated with insubstantial construction and susceptibility to fire as well as to the usual processes of weathering and planned replacement.

In some contrast with the flimsier elements of colonial Hobart were the leading structures representative of Government, a number of which, as we have seen, remain. Government House, designated "house and offices" was allotted an annual value of £500 and rated therefore at £25. The military barracks were compositedly rated at the same amount. The charge of only £20 for the Custom House and £15 for the Ordnance Stores suggests a measure of indulgence for Government property, though there is nothing to indicate that such a policy was formally pursued as has more recently been the case.

The Structure of Property Ownership in 1847

Having examined the main spatial characteristics of property valuation (and, by implication, value) together with the rates based thereon for certain types of premises, it remains to examine the

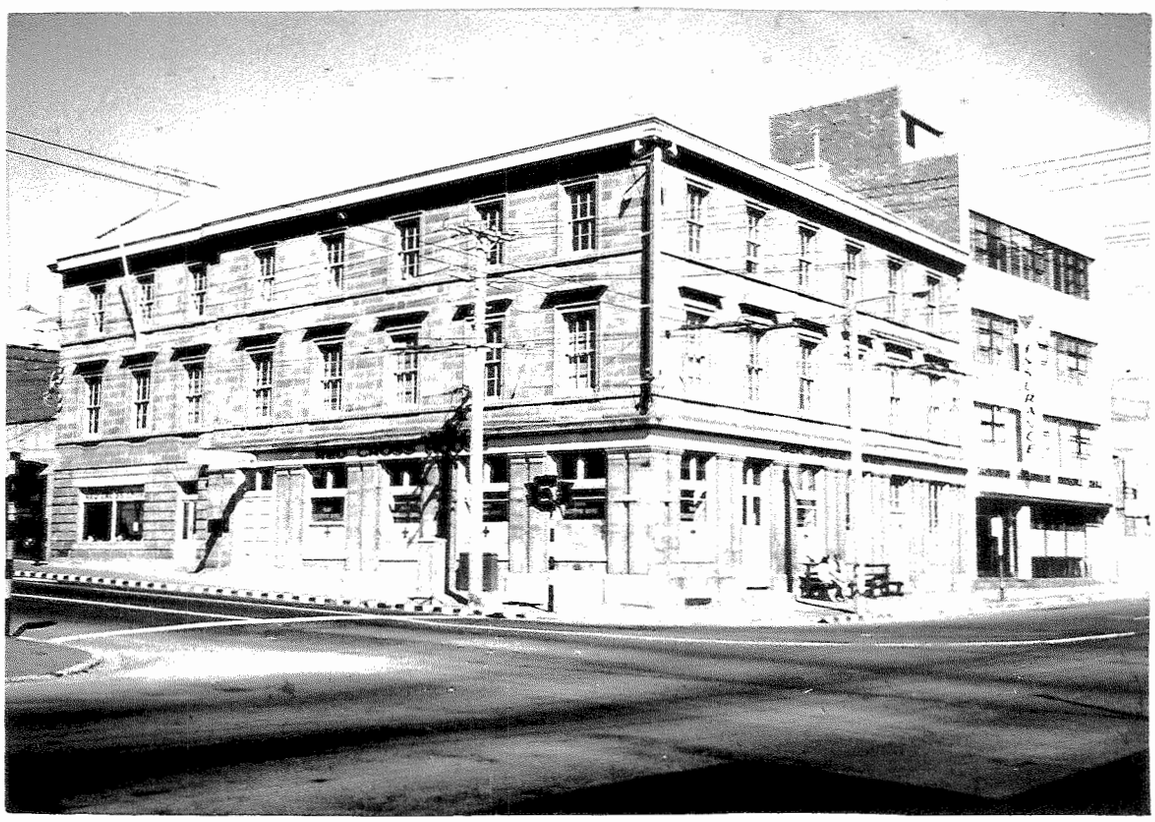

Fig. 2.6 Red Cross House, Collins and Argyle Streets, 1968. Built as Richard Lewis and Sons' shop and residence in 1846, its assessment at £350 annual value in 1847, made it the most valuable non-government property in Hobart (equally with Walker's mill and brewery) after Swanston's bonded store on New Wharf.

distribution of property among owners and by functions. This latter will be analysed, as its importance deserves, in the next Chapter.

Two facets of property ownership in Hobart of 1847 are considered. Firstly, the extent of multiple ownership, alias the degree of property concentration among leading owners, has been analysed. Secondly, the relationship or correlation between ownership and occupance (tenancy) has been investigated. Both answers were sought for the urban area as a whole rather than on a differential area basis. Inspection of the valuation block-data suggested that little light would be shed on urban processes by block-differentiation of ownership concentration, but in the case of owner-occupier correlation it might be expected that central-peripheral differentials would emerge. It was decided that the considerable additional labour involved to test such a possibility was not merited.

To find the manner in which Hobart's property was distributed among its property-owning inhabitants the individually assessed premises in the Assessment Lists were grouped under owners' names. One difficulty of interpretation had to be resolved concerning the coincidence of names as listed. In a number of cases a particular surname recurred with identical spelling but with first-name variants. Where a different initial or full first name from those previously attached to the same surname occurred, that owner could clearly be assumed to be another person. But what, for example, of J. James and John James? Were they one and the same? Whereas a certain 'feeling' for the probabilities of cases develops in working with the block-data plots, this cannot be shown to be reliable and so a rule of thumb was adopted.

At first it was decided that if the names in question were associated with allotments in adjoining blocks they would be taken as representing the same owner. In normally gridded areas this meant consideration of four blocks around the one currently under review. This seemed to be casting too wide a net in the search for coincidence, particularly as there was no convincing evidence that an owner was much more likely to select a second or third property in the block

across the street than in an area several blocks distant. The criterion adopted was therefore coincidence of similar nomenclature within the one block. This still left a quite substantial number of first-name blanks — such as "-Johnson", unrelated to T. Johnson, and John Johnson — when there is a fair likelihood that at least some of these blanks would coincide with another of the clan had the assessors set down the record more fully. Similarly "Mrs. Addison" could not be assumed to be either party of the joint owners H. & J.E.Addison and so counts as another owner with that surname. The sum result of these assumptions is that property ownership will appear to be rather less concentrated than it almost surely was. A final variant of the same problem is concerned solely with possible spelling errors, rather than incomplete or inconsistent recording. Thus Thos. Alcock is taken to be a different owner from T. Allcock as is John Allen from John Allan.

Altogether 2,940 properties were assessed in 1847. The total number of owners as defined above was 928, giving a mean of just over 3 properties per owner (Appendix XII). With a total annual value of a little more than £100,000, the average valuation per owner was £110. Table 2C indicates how almost 25 percent - £25,108 - of the assessed annual value of all Hobart property[12] was held by the leading twenty owners. The Government was easily the prime owner by value, with only six others holding in excess of £1,000 annual value, and a further sixteen (three more than those tabled) holding property assessed at more than £500. The analysis of numerically largest holdings in column 4 shows that the leading six owners were the same (though not in the same order) as the first six in the value table, after which owners of numerous relatively lowly assessed properties, such as Moodie and Kelly, came in. So, although 17 percent of the properties and 25 percent of their valuation was vested in the first twenty ranking owners there remained over 2400 properties in the hands of 900 others. We might now ask what proportion of the urban population lacked a stake in the real estate of their area of occupance. With a total

12 Except, apparently, churches which were omitted from the Assessment Lists.

population of about 20,000[13] of whom a majority were probably minors

Table 2.C

Leading Property Owners by Value and Number 1847

Rank (1)	Owner (2)	Total Annual Value Held (£) (3)	Total Number Properties Held (4)	Owner (5)	Rank (6)
1	Government	4,534	32	Government	4
2	J. Jackson	2,178	44	J. Jackson	1
3	William Lindsay	2,082	37	William Lindsay	2
4	David Lord	2,027	27	David Lord	6
5	Judah Solomon	1,986	34	Judah Solomon	3
6	John James	1,792	30	John James	5
7	H. & J.E.Addison	1,222	19	H. & J.E. Addison	14
8	G. Butler	978	23	G. Butler	9
9	C. M'Lachlan	884	26	D. Kelly	7
10	Henry Hopkins	818	26	John Tilley	7
11	Chas. Swanston	811	21	J. Friedman	10
12	John Swan	768	21	John Lewis	10
13	John Walker	756	20	Jas. Moodie	12
14	Wilson & Tonkin	689	18	J. Boys	15
15	John Fisher	672	20	John Fisher	12
16	W. Harris	641	18	W. Harris	15
17	J. Dunn	617	18	Richard Hurst	15
18	Chas. Gaylor	568	18	H. Webb	15
19	John Morgan	545	18	Alex Wright	15
20	John Ingle	540	17	J. Brown	20
			17	W. Williams	20
Total 20 owners		25,108	504	21 owners	

Source: Assessment Lists, op. cit.

and several hundred others were in prison or on probation, the potential adult property owners may have numbered as few as 8,000. Many of these were married couples, with the male bread-winner the likely title-holder and certainly infrequent dual (as distinct from joint-) ownership by husband and wife. It may be then, that about 4,000-5,000 individuals or married couples, given the economic means, were in a position to own property. Thus, with upwards of 900 owners, in actuality, some 80 percent, very approximately, of the soldiers and settlers were property-less. This represents a poor state of affairs by mid-twentieth century standards in this country, but not

13 21,467 inhabitants of the Hobart Town Police District at the Census of 1847.

perhaps a bad one in contemporary terms. At the same time, if we make another estimate that the annual value was of the order of ten percent of capital value (making a substantial two-storey house worth £1,000), then Messrs. Jackson, Lindsay, Lord, Solomon, James and the Addisons each possessed upwards of £10,000 worth of property in 1847: a tidy, but feasible, stake.[14]

The second facet of property ownership, landlord-occupier coincidence, provides a check on the estimate already made of the breadth of ownership through the community. The Assessment Lists carried the names of 2645 occupiers, leaving almost 300 properties for which the occupier's name was not recorded, and which had therefore to be omitted from the analysis. The basis of judgment as to whether the landlord or his spouse was also the occupier was simply duplication of surname, plus first name or initial or "Mrs." in lieu. Thus Alexander Frazer (occupier) is taken to be A. Frazer (landlord) of a house and shop in Collins Street, and Joseph Oakley (occupier) is assumed to be the husband of Mrs. Oakley (landlord) of a nearby tavern.[15]

In 588 cases the landlord and occupier coincided, giving an owner-occupance rate of 22 percent and, complementarily, a tenancy level of almost 80 percent. This would seem to give reasonable confirmation of the previous assessment of the extent of community participation in ownership of property. One noteworthy feature of the landlord-occupier relationship is the obvious tenancy of the row houses, confirming the suspicion that they were largely built for rental returns rather than for sale as units. Thus the longest homogeneous series of all, designated "Moodie's Buildings", consisting of ten consecutive dwelling units each of £10 annual value, all owned by James Moody [sic], was occupied by nine different tenants none of whom was the landlord.[16] Similarly

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14 Compare the situation in the new towns of the then western America: in Lexington of 1808 16 merchants and manufacturers owned over one-third of the total valuation of more than a million dollars; in Cincinnati of 1818 one resident owned 31 houses and 39 of the 8000 residents had assessments of over $10,000; and in St. Louis of 1811 over 60 percent of the $134,516 assessment total was held by six men, the largest being $19,930 (R.C. Wade: The Urban Frontier, p. 109 (10)).

15 Assessment Lists, op. cit., p. 2

16 Ibid., p. 24

Kelly's Row behind Liverpool Street consisted of 16 houses and shops varying in annual value from £6 to £13, three of them occupied by Thomas Kelly, all owned by John Lewis.[17] Since these data were recorded linearly rather than spatially the incidence of tenancy is available by page, not by block. With the number of occupiers on 58 pages varying from 59 to 21 and the number of coinciding landlords from 19 to nil, the highest rate of owner-occupance was 19 out of 42 in Goulburn and Bathurst Streets west of Barrack. The area consisted almost entirely of low-value houses of relatively recent development, evidence perhaps of a trend away from rental towards house ownership among the less affluent sections of the mid-nineteenth century urban dwellers.

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17 Ibid., p. 48

References Chapter 2

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(2) H. Hoyt: One Hundred Years of Land Values in Chicago, Chicago, 1933.

(3) W. Firey: Land Use in Central Boston, Harvard, 1947.

(4) B.T. Robson: An ecological analysis of the evolution of residential areas in Sunderland, Urban Studies, 3, 2, 1966, 120-142.

(5) R.U. Ratcliff: Urban Land Economics, New York, 1949.

(6) B. Anstey: Isovals, a new system of land value notation for planners, Journ. Town Plan. Inst., 36, 1950, 267-272.

(7) E. Curr: An Account of the Colony of Van Diemen's Land, London, 1824.

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(9) Statistics of Van Diemen's Land (Blue Books): 1842, CSO 50 17, Accession 3334; 1847, CSO 50 22, Accession 3338; 1848, CSO 50 23, Accession 3339; State Archives, Hobart.

(10) R.C. Wade: The Urban Frontier. Pioneer life in early Pittsburgh, Cincinnati, Lexington, Louisville, and St. Louis, Chicago, 1959.

Chapter 3

Functional Distribution and Structure

From the viewpoint of urban geography the functional composition of a town or city is probably the most vital of its structural components. Contemporarily this requires time and resources to explore, but again, historically, much depends upon records of a kind which too often do not exist -- at least in the distributional if not in the purely numerical sense. For Hobart we have statistical returns of factory and hotel numbers and occasional references to their size, location or viability (1). But for a record of property from which the functional units can be comprehensively located, their spatial relationships derived and analysed, and the contribution of particular functions in particular areas assessed, we must turn again to the valuation roll of 1847 (2) which provided the basic data of the previous chapter.[1]

It will be remembered that together with valuation and occupancy data the register noted in simple terms the functional character of each property. This datum was plotted (as in Figure 2.1) on a town plan base to convert the linear record into areal distributions. The units (and ultimately the range of symbols) employed were on the one hand dictated by the nature of the record, and on the other influenced by the need to make a manageable classification for purposes of rational tabulation, plotting and recognition. Thus, while there was no break-down of retail shops even to the limited range of the mid-nineteenth century, there were over 50 different descriptions of property as well as combinations of several. These have been grouped into about a dozen categories, the components of which and the symbols used to represent them areally are shown in Table 3A.

As with all functional classifications inconsistencies are difficult to avoid in the face of multiple alternatives, and one is better placed to classify the data after they havebeen plotted according to a system chosen so that they can be plotted. Many properties are not simple and unitary in the functions they perform or services they provide, and many also can be classified from the viewpoint

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1 Hall's extensive use of the Post Office directories for his study of London's industrial evolution provides a parallel (3)

Table 3A

Functional Categories of 1847 Property

Category	Symbol	Components (as recorded)
Residences	●	House, skilling, hut; parsonage, chapel-house, school-house
Shops (retail)	□	Shop; smith's shop; bank; counting house
Markets	▣	Mart; auction mart
Hotels	■	Tavern
Warehouses	△	Store, warehouse; timber yard; custom store, bonded store, ordnance stores; yard & shed
Factories	▼	Foundry, tannery, slaughter-house, mill, steam mill, brewery, brewhouse, soap works, shipyard, lime-kilns, workshops
Offices	○	Office; public offices, police office, accounts office, roads' office, commissariat pay office
Public Buildings	▨	[Govt.] House and offices, Custom House, court house; barracks, battery, magazines; guard house, watch house, gaol; hospital, infirmary; post office; school, infant school
Churches	♁	[These were not included in the 1847 Assessment Lists, but leading churches were added from Sprent and other sources]
Halls	⌂	Hall; Temperance hall; music hall, theatre
Stables	⊓	Stable, livery stable, orderly's stable

of the operator and from that of the consumer. Generally an attempt has been made to accommodate the view of those on the outside looking in, providing this is not heavily at odds with the property's contribution to the differential functions of the community overall. Thus Government House is regarded as a symbol of Government, and therefore as a public building, rather than as a residence for the Governor. A bank provides

a commercial service as do shops selling goods other than money, and yet it is quite distinctive enough in its operations to merit separate designation. Because there were so few banks it was decided not to allocate them a symbol, although they were tabulated separately. On the other hand the taverns of 1847 were primarily, even exclusively, engaged in retailing liquor, but they were much more numerous than banks, which when coupled with their significant social implications made a separate hotel category and symbol essential.

Government and community activities are perhaps the most uncertain to classify, and a case could easily be made for the public buildings category to be much less catholic in its embrace, including as it does administrative, judicial, military and social functions. But since there were less than 40 representatives of this total range recorded in 1847 and the ultimate aim was to differentiate fundamentally distinct types of function in their spatial arrangements at different periods, this composite was maintained. 'Office' is possibly the worst single functional designation of all since it is difficult if not impossible to know the extent of clerical functions relative to over-the-counter transactions with the public or to similar activities which approximate the role of some governmental arms and agencies. An administrative category was considered, but the next question to ask is administration of what - law, health, public finances, etc.? In so far as this concerns the office category it is no solution, for as time goes on we find a substantial increase in the office adjunct of purely commercial institutions.

Distribution of Functional Units

While the functional composition of the whole Hobart Town area can be analysed from the plotted property units, it is not practicable to reproduce the entire distribution of functional symbols on one page. Consequently a central area of nineteen blocks around the point of highest land value at the intersection of Elizabeth and Liverpool Streets is shown as Figure 3.1 to illustrate the physical arrangement of unit property functions; all 110 block distributions are recorded in their 14 cartographic sections as Appendix V (key to sections is Appendix IV).

Apart from the expected concentration of functions in the same inner blocks as contained the heaviest concentrations of Sprent's

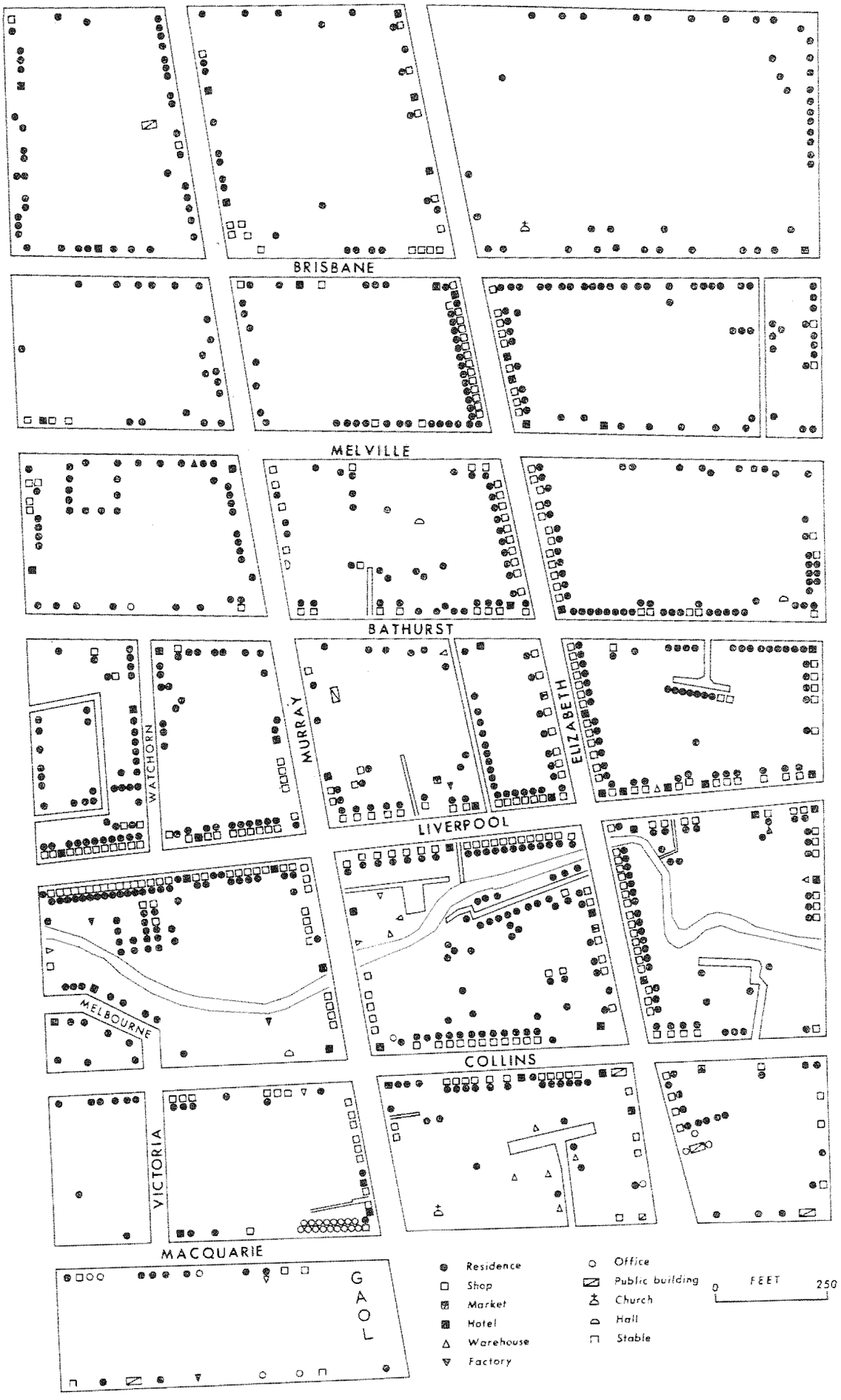

Fig. 3.1 Distribution of functional units 1847 in nineteen inner blocks (Assessment Lists, 1847).

buildings, the most noteworthy feature is the frequency of functions along Elizabeth and Liverpool Streets. The great majority of the units marking this dual axis consisted of a shop and residence, which was a combination found commonly throughout the commercial area. Its numbers are now much reduced in favour of offices, but two or three score after the style of Figure 1.16 may still be seen.

A second feature to note is the prevalence of functional units, particularly houses, away from the street frontages in the interior block spaces. This is very true of the main block, where Cat and Fiddle Alley gave internal access and effectively extended the block frontages (Figure 3.1). Small unit size is a prerequisite for this kind of distribution, and as large functions (such as department stores) developed the interior units would predictably come under siege. In outer areas at this time there was not the same pressure on land and the substantially residential occupation was, with random exceptions, oriented to the frontages.

The shares of major functions in the total number and valuation of property comprising the town section shown in Figure 3.1 are given in Table 3.8. Perhaps the most striking feature of the inner area's

Table 3.8

Functional Proportions of Block Total Valuation

Block No. (Fig. 2.5)	No. Units	Total Valuation (£)	Shops & Banks	Hotels	Warehouses	Total Commerce	Residential	Factories	Offices	Public Bldgs.
65	46	742	5.0	11.5	-	16.4	80.2	-	-	-
66	23	582	10.1	7.7	-	17.9	82.1	-	-	-
67	50	877	7.9	11.4	-	19.3	76.6	3.0	-	1.1
68	113	2829	28.0	11.5	-	39.5	60.5	-	-	-
69	113	3103	38.4	17.1	0.8	56.3	38.3	4.1	-	-
70	55	2789	34.2	12.7	1.8	48.7	26.4	-	24.9	-
71	24	2051	17.0	-	2.4	19.5	38.5	12.2	9.0	18.5
81	44	1058	24.9	26.0	-	50.9	49.1	-	-	-
82	61	1328	24.3	18.1	-	42.4	57.6	-	-	-
83	70	2136	37.3	9.8	-	47.1	50.0	-	-	-
84	83	4497	41.6	12.7	-	55.7	42.6	0.8	-	0.9
85	126	5242	41.5	13.9	1.2	56.6	39.5	-	3.8	-
86	54	2720	29.1	12.1	19.9	61.1	28.9	-	1.5	8.6
96	43	1544	-	3.9	-	3.9	96.1	-	-	-
97	72	1987	10.5	20.1	-	30.6	69.4	-	-	-
98	76	1718	27.2	7.0	-	34.2	64.0	-	-	-
99	91	3285	31.0	24.4	1.5	55.4	43.2	-	-	-
100	89	3783	36.4	19.8	-	59.1	43.1	0.7	-	-
101	31	1739	33.9	-	-	33.9	47.4	-	8.3	10.4

Source: Assessment Lists, op. cit.

functional structure revealed is the relatively small proportion of property value vested in commercial uses. Even the two most valuable blocks, 85 and 84, have little more than 40 percent of their assessed property in the shopping function, and only four of the 19 blocks tabled have a greater proportion of total value in shops and banks (where present) than in residences.

Commercial Characteristics

But this is to judge 1847 conditions by present standards, a snare to be avoided by the unwary historical geographer unless the avowed aim is comparison. The fact that shops may now form upwards of 70 percent of central area property need not mean that this was always so; in fact one of the main aims of the whole current investigation is to find the nature of change, both physical and structural. The writer has not found strictly comparable evidence based on valuation to show how representative of mid-nineteenth century functional structure Hobart might have been, but it can be safely maintained that retailing was by no means as fully developed as now. Many richer households still traded directly with wholesalers or import agencies and the range of commodities was, as in other and much grander towns abroad, relatively small. It is hardly likely that Hobart was in advance of its European models, but neither does it appear to have been notably in arrears. One observer in 1839 commented that "some of the shops are showy and respectable, even tasteful and elegant; displaying an appearance equal to that of many in London"[2] and Dorothy Davis tells us that "In the nineteenth century industrial development....transformed the face of Britain, but retail trade was for a long while allowed to jog along in its traditional grooves. Until at least half way through the century the size of shops, the kind of people who ran them and their methods of buying and selling were all very much as they had been a hundred years before."[3] And that, to sum up Mrs. Davis's most informative section on the eighteenth century, was pretty awful by twentieth century standards of provision.

However, social history is not the central issue here, and while

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2 J. Dixon: The Condition and Capabilities of Van Diemen's Land as a Place of Emigration, p. 50 (4)

3 Dorothy Davis: A History of Shopping, p. 252 (5)

we can rely on such writers as Davis and Jefferys (6) for the character of British shopping for purposes of comparison, the import of the matter is that with limited diversification of commercial outlets the competition for land was significantly less than in modern business districts. Functional selection was slight, and as far as Hobart's functional structure was concerned the whole process of urbanisation was in its infancy. Or was it?

Undoubtedly competition for central land was less than in modern city centres, but it can be argued that sufficient agglomeration of like uses and sufficient differential site selection had taken place at the centre to regard the town as youthful rather than infantile. Shops could, after all, be located almost entirely sporadically, or at least be confined to corner sites over a wide area of residential occupance, leaving a few warehouses and public buildings clustered around the port. Perhaps this is too much decentralisation to expect, but what we find is in any case a well defined clustering of the shopping function in a few adjoining blocks. In the highest value block 41 of 53 frontages were shops and half the remainder were five hotels and one market. In four blocks of Liverpool Street between Argyle and Barrack only five of more than 70 south-side frontages were not shops or hotels, and all 30 between Argyle and Murray were shops or taverns. On the north side only a dozen taverns, a warehouse and a few houses were numbered among nearly 90 frontages. The pattern was repeated in Elizabeth Street where 60 consecutive shops and taverns occupied the east side between Collins and Brisbane, rather fewer on the west side.

The fact that so many of the 1840s shops were combined with residential functions means of course that site selection was not as functionally rigorous, even exclusivist, as the occupation of frontages suggests. In visual terms the common arrangement of ground-floor shop with first-floor residence meant that the overall impression was far from overwhelmingly commercial. Nevertheless, if we add other commercial elements, notably hotels and warehouses, to the strictly shopping sector, a substantially increased commercial component results for some of the inner blocks. Only the sixth of the six most valuable blocks (those between Collins and Bathurst Streets in Figure 3.1)

contained less than 55 percent of property value in commercial functions.[4]

Commercial premises were thus in a dominant valuation position and numerically second only to residential units in a number of proximate blocks each of which held one of the larger shares of total urban property. Was the situation comparable elsewhere? Reference to Appendix I shows that outside the six most valuable blocks commercial units rarely approached the number of residential units, but more often represented a substantial proportion of block valuation. In a few cases, however, notably in the areas near the port, residential functions were substantially and in one case wholly subsidiary to commercial activities. It does seem, from Table 3C, that 45 out of

Table 3C

Commercial Proportion of Block Valuations
(by number of blocks)

Less than 10 percent	10-19.9 percent	20-29.9 percent	30-39.9 percent	40-49.9 percent	More than 50 percent
43	22	13	10	6	16

Source: Assessment Lists, op. cit.

of 110 valuated blocks with upwards of 20 percent of property value in commercial uses represents a considerable degree of dispersion, even granted the tendency for one tavern to offset the value of several cottages in some of the less central blocks.

At the same time, it should be borne in mind that very few of the early commercial premises were notable by their size, appearance or appointments. The evidence for this is circumstantial rather than definitive. Observations such as Dixon's (above) might more or less favourably compare Hobart's better shops with London's, but it is clear that until the second half of the century they hadn't much to beat. In his Sketches by Boz (7) Dickens sceptically, almost scathingly, commented on "the epidemic" among shopkeepers of which "the primary

4 It should be noted that where a property was listed as "shop and house" and given a single valuation figure, the figure has been divided equally between the two functions. This is in general accord with valuations made separately outside the business centre, but in some cases under-rates the commercial share of central valuations.

symptoms were an inordinate love of plate-glass, and a passion for gas-lights and gilding." The disease, according to Dickens, "attained a fearful height" when "dusty old shops" were replaced by "spacious premises with stuccoed fronts and gold letters".[5] There are few pre-1850 illustrations of Hobart's shops available, but their form some twenty years later bears out the generally undistinguished and frequently dingy appearance of individual premises up to that time. Most were quite small, as suggested by their densities in the main shopping blocks (Figure 3.1), and if this is not convincing evidence the comparative valuations of shops and other functional units throughout the town (Table 3.D) can be regarded as conclusive. Further, the existence of more than 500 shops meant one trading unit

Table 3.D

Summary of Hobart Functional Characteristics in 1847

Item	Residences	Shops	Banks	Hotels	Warehouses	Offices	Factories	Halls	Publ. Bldgs.	Total*
No. of units	2473	541	7	152	62	32	32	4	31	3337
Value (£)	55,967	16,302	1,045	12,662	6,013	1,545	2,791	282	4,788	101,462
Average Value (£)	22.6	30.1	149.3	83.3	97.0	48.3	87.2	70.5	154.5	30.5
% all property value	55.1	16.1	1.0	12.5	5.9	1.5	2.8	0.3	4.7	100.0

* Three stables representing 0.1 percent of all property value are included in this column

Source: Assessment Lists, op. cit.

for less than 40 residents on average, by no standard of judgment a prolific clientele. Contemporary newspaper advertising gives a supporting impression of small businesses, and Jefferys leaves us in no doubt that in Britain before 1850 "almost without exception they [the retailers] were working for themselves, controlling only one business or owning only one shop. The family tradition of son succeeding father was dominant, and the 'living-in' system for apprentices....was accepted as natural and usual in the

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5 Charles Dickens: Sketches by Boz, "Gin-Shops", Chapter 22, pp.224-5, Fireside edition.

medium and large-sized towns."[6] That a few central shops ten or more times the value of the smaller units existed need not invalidate the general proposition. They, it seems, were evolving at the same time as the British retailing system began to show an awareness of increasing demand resulting from the improved purchasing power of the industrial population.

Markets, Taverns and Warehouses

One element of the shopping function which has not been separately itemised in Table 3D is the market. Three 'marts' were listed in 1847, all in the two leading blocks (central column Figure 3.1). Inexplicably the well-known market in front of the Custom House, revived as the New Market between lower Collins and Macquarie Streets in the 'fifties, did not appear, presumably because it had become a storage area rather than a place of exchange. Also listed was an 'auction mart' south of Collins Street. The importance of the markets in the total shopping provisions of the town is not precisely known, but there is little doubt that they handled most of the perishables publicly bought and sold. Their successors exist largely for wholesale produce transactions in this country today, though they appear to fulfill a significant retail function in most other major regions of the world outside North America. In the mid-nineteenth century "markets were still of the first importance to the housewife" in Britain, representing "an immediate connection.....between the food on the table and the surrounding countryside."[7] The valuations of £120, £150 and £200 allotted the Hobart markets gives some indication of their standing, particularly as they did not by their nature occupy distinguished premises, but nevertheless ranked with the higher-rated shops. Their wide usage among the population makes them the equivalent of many more than their number of ordinary (fixed) shop units, effectively reducing even further the average number of customers per shop; remembering also, of course, that any one customer would patronise at least several different kinds of shop.

While the average shop valuation in Hobart of 1847 was just

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6 J.B. Jefferys: Retail Trading in Britain 1850-1950 , p.2

7 Dorothy Davis, op. cit., p. 253

one-third higher than the average house, the typical tavern attracted an assessment almost three times as high as the shop and nearly four times the residential valuation (Table 3D). The public house was an almost ubiquitous feature of colonial settlement, but even ubiquity is relative and neither Hobart nor Sydney could quite match London's mid-eighteenth century score of one public house in every 15 houses. However, this density had fallen to about one in 25 by the 'nineties[8] with revised licensing, so Hobart's 1847 ratio of one tavern to each 16 houses was rather indicative of a hard-drinking community. In the early 1830s Lieut. Breton (7) found that a tally of 84 public houses or one for every 78 free inhabitants left Hobart slightly behind Sydney's one for 68. Now with the ratio at one tavern for each 130 or so of the total urban population, the town could barely be regarded as reformed in its drinking habits.

At the same time we have an official record[9] that only 39 of 179 houses licensed on September 22, 1848 were "of low character", and their general frequency cannot now have merited Dixon's 1839 comment that "stand at the corner of any street, and fifteen to twenty [taverns] are in sight."[10] However, by standing at some particular corners, say Elizabeth and Collins or Liverpool and Argyle, as many as ten or twelve taverns might have been seen by a long-sighted and slowly revolving observer. In fact there were some areas of notable spirituous concentration. The small Block 46, bounded by Harrington, Barrack, Liverpool and Goulburn Streets, could claim with eight taverns to be Hobart's leading alcohol dispensary. Blocks 99 and 100 in the centre carried twelve taverns between them, and in Blocks 114 and 115 a total of ten public houses dominated the commercial values, outstripping all functions other than the residential. This area of the base of Old Wharf was undoubtedly the sleazy end of town in colonial days, and the £67 average value of six Block 115 pubs as against £150 for five in Block 100 would seem to bear this out.

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8 Dorothy Davis: op. cit., p. 213

9 Statistics of Van Diemen's Land, 1848, p. 20

10 J. Dixon: op. cit., p. 50

Those in Block 46 rated even lower with an average of £58.7, and their location in an area transitional between the business centre and the lower value residential tract on the west doubtless fostered the existence of some of the more primitive representatives of a flourishing and rewarding form of retailing.

The fact that warehouses attracted an average valuation surpassed only by banks and public buildings is probably sufficient testimony to the functional role of this normally mundane sector of commerce in the life of mid-century Hobart. They contributed substantially to the presence of the higher-value property around the port through which, as will be examined in Chapter 4, all of the town's external connections and much of its total goods exchange flowed. The warehouse buildings themselves were substantial (see Figure 1.17), often in stone, and despite internal simplicity represented considerable capital value. It will be recalled that Charles Swanston's bonded store on New Wharf was the most highly rated private property in the town (annual value £500), and at the time of the 1847 assessment two stores in Salamanca Place owned by W. Knight and J. Solomon and valued at £200 and £300 were being used by H.M. Government to accommodate overspill troops from the Barracks. Of 62 stores enumerated more than half were on Old and New Wharfs, which held 18 and 19 respectively, and the addition of Salamanca Place saw over two-thirds of all the stores accounted for in the immediate environs of the port. The only other concentration of any note was in the central Blocks 85 and 86 which each contained several stores; no other block in the town held more than one.

Manufacturing

It is fair to say that Hobart in the 1840s was regarded as an outpost of government, a convict repository and a trading town rather than a budding industrial centre. If this view was essentially correct the town nevertheless had held 38 percent of Van Diemonians employed in manufacturing at the 1841 Census compared with 29 percent of the total population.[11] Manufacturers were broadly defined in the

11 Statistics of Van Diemen's Land, 1842, CSO 50 17, Accession 3334, State Archives, pp. 322-3

light of more recent usage, including draper, tailor and tobacconist. Tradesmen such as these were categorised by Jefferys among the producer/retailers who 'made, produced or grew their wares as well as selling them'.[12] A good deal of labour and potentially much skill was involved in mixing and in that sense 'making' products like tobacco which are now ready-packed and are retailed but in no sense made at the point of distribution to the public. In these terms it is easy to see how 1350 Hobartians were in manufacturing employment compared with 982 in commerce and 829 in agriculture.

The Return of the Manufactures[13] shows 22 industries and 86 enterprises in which Hobart's manufacturing workers could have been employed, while the Arthur Street and Tolosa Street (Glenorchy) limestone quarries were additionally recorded. It seems highly unlikely that average employment per enterprise would have been upwards of 10 persons at this time in the light of labour shortage, scarcity of capital and the counter-attractions of primary production. In discussing these issues Hartwell (8) concluded that manufacturing began to expand in VDL in the latter 'forties in response to growing community needs and the protection afforded local production by the enforced import reductions of the early part of the decade. He also maintained that the owner-operator was the characteristic 'industrialist' of the time.[14] In this he is supported by the record of only 32 manufactories in the 1847 Assessment. Clearly many of the enterprises which produced goods were either listed as shops, being of the 'producer/retailer' kind, or even more deceptively had the appearance of residences and were so listed. This would be perfectly feasible where the products were small and hand-made as with footwear and clothing. Certainly the premises assessed in 1847 were of the kind not easily mistaken as shops or houses: breweries, mills, slaughterhouses, tanneries, foundries, shipyards, soapworks and limekiln.

Unfortunately, even some of these distinctive elements of

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12 J.B. Jefferys: op. cit., p. 2

13 Statistics of Van Diemen's Land, 1842, pp. 362, 364

14 R.M. Hartwell: The Economic Development of Van Diemen's Land 1820-1850, pp. 144-146

manufacturing do not tally with the 1847 statistical record, which shows for instance, 19 flour mills (14 wind and water and five steam) and one steam sawmill,[15] compared with only six mills assessed. Because the valuation procedure seeks to gather rates from all possible contributors and is therefore unlikely knowingly to omit rateable premises it can only be supposed that a number were so small as to be rated residentially or that the Census included some functional units located within the Police District but outside the (rated) urban area. Mills would particularly lend themselves to wider distribution and to the differential numbers resulting therefrom. The rivulet was naturally a strong locational force in the distribution of mills within the town, but the wellknown landmark in Cromwell Street, Battery Point depended on wind rather than water, while the steam mill on Old Wharf presumably looked to ready shipping access for flour exports. Perhaps more markedly than the mills, the breweries sought proximity to the Hobart Rivulet. Ten were assessed in 1847, and they did not include the enterprise established higher upstream at the Cascades in the 'twenties. Only six breweries were recorded for 1841, so their increase at a time when some other manufacturing numbers had declined in the face of competition or economic difficulties suggests that, however tight the purse-strings of the public, Bacchus was not to be denied.

Of the other forms of manufacturing practised in Hobart of 1847, which included one pianoforte maker, one hat-maker, and a soap factory (Figure 3.3), two deserve brief elaboration: slaughtering and shipbuilding. The town's four slaughterhouses were located in the Market Place - lower Macquarie Street vicinity, in Sackville Street nearby, at New Wharf, and in Liverpool Street between Murray and Elizabeth. This last was adjacent to the most highly valued of the markets, making for convenience of product-disposal, but a dubious component of the second-ranking town block. There was, again, considerable precedent for such disregard of aesthetics and hygiene in the experience of the emigrant population: Davis reports that as

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15 Statistics of Van Diemen's Land, 1847, CSO 50 22, Accession 3338, State Archives, n.p.

as late as 1873 some 1500 private slaughterhouses remained in the London metropolitan area,[16] making it inevitable that many were closely juxtaposed with residential and shopping districts. While slaughtering is rarely if ever to be found in European town centres now, open perishable food markets indicate a carry-over of traditional attitudes which have been eliminated in Australasia and cause positive dismay in North America. In any event the Hobart slaughterhouses disposed of 4,320 cattle, 458 calves, and 62,550 sheep and lambs in 1846; slightly fewer animals than for several preceding years, slightly more than the 60,000 total for 1848.[17]

In a rather introverted pattern of small, basic, consumer-non-durable production shipbuilding probably provided the only capital goods the colony could offer in the 1840s. Only two shipyards appear in the 1847 assessment, both adjacent on Battery Point below Trumpeter (now Napoleon) Street, owned by John Watson and Risby Brothers, and carrying valuations of £100 and £80. Each of these covered a house as well, so the figures were not notably high. The statistical record shows that ten ships were built in 1847, varying from 17 to 18 tons, and in the following year output increased to 18 vessels weighing a total of 1,438 tons.[18] Not a spectacular contribution to the world's shipping, but a significant contribution to production, employment and the development of skills in the young colony.

Administrative and Social Units

Of the other functions mentioned in Tables 3.A and 3.D which helped make Hobart Town a modest outpost of empire in the 1840s the social and administrative units deserve some further attention. Quite the most impressive physically were the latter, and mention has already been made of some such as the Custom House. It is to be expected that in the nature of the settlement the symbols of administration would loom large, and so it was, promoted in the early stages by the building enthusiast from Sydney Cove, Lachlan Macquarie. Several blocks were substantially or wholly occupied by government functions: Block 58 -- Mulgrave Battery and Ordnance stores, Block 39 -- military barracks,

16 Dorothy Davis: op. cit., p. 256

17 Statistics of Van Diemen's Land, 1842-48

18 Ibid., 1847 and 1848

Block 71 — gaol, Block 73/75 — Custom House, Block 87 — police, court house, public offices and Government House, Block 109 — Commissariat stores and Bank of V.D.L., Block 105 — penitentiary. Whether through solidity of construction or frequency of use these functions undoubtedly exerted an influence on the townscape and the townspeople over and above their occupation of space, which was itself considerable. Their average annual value was seven times that for houses and nearly double that for hotels.

Only four public halls were designated in the 1847 assessment. The Temperance Hall in Bathurst Street was occupied by the Tee-total Society and valued at £30; a music hall in Collins Street just west of Murray carried an annual value of only £42 despite its central position; a hall in Melville Street owned by the Wesleyan Church was occupied by the Mechanics' Institute and assessed at £60; and the now famous Theatre (Royal) in Campbell Street was sufficiently impressive a building to resist the depreciating influence of the pubs, slaughterhouse and lowly houses that surrounded it to cost its owner, Peter Degraves, the rates on an annual value of £150.[19] Of course a serious omission from any functional analysis of colonial Hobart dependent upon the valuation assessment are the churches and chapels. Substantial tracts of pre-urban land had been set aside for church buildings and burial grounds and the general impact was considerable. Not only was the physical presence of the churches obvious, especially where architectural value capped eminent relief, but the orientation of society to religious observance was general. Approximately 13 houses of worship were operative in Hobart of the latter 'forties.[20]

Churches by nature and association are less likely to be demolished in favour of new or better uses than most functional units, and some of those which remain and retain their original appearance have been illustrated in Chapter 1. In Figures 3.2 and 3.3 two important unit functions of 120 years ago which no longer stand are shown more or less as they were in the colonial town. Another of singular importance which has been replaced on the same (Block 107) site is the

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19 A recent pamphlet History of the Theatre Royal by M. Roe traces the long theatrical history of the building.

20 J. Wood: Van Diemen's Land Royal Kalendar, 1847, p. 80 (9)

Fig. 3.2 Colonial Hobart's gaol, corner of Murray and Macquarie Streets. Built 1814-18, abandoned 1857 (Tasmanian Museum collection).

Fig. 3.3 Warehouses and soap factory at Old Wharf, developed from the causeway to Hunter's Island (Tasmanian Museum collection).

Colonial Hospital, annual value £300, with the government Infirmary (value £70) adjacent. Across Campbell Street in the next block east, a private hospital, landlord Mrs. Guest, rated equally with the infirmary.

Schooling was also much associated with the churches, despite the development of interest in secular education, particularly under the stimulus of Governor Arthur (10). Thus while less than 450 of nearly 2,500 children under 15 were receiving education in V.D.L. in 1825, just over 300 of them in the Public Schools,[21] the total enrolment in Board of Education and Public Day Schools in 1845 was 1510.[22] However, in Hobart Town in 1847 six schools associated with Anglican churches enrolled 584 pupils and a further 196 Roman Catholic children attended their own school.[23] Whether or not these involved additional buildings to the churches themselves, they were not assessed for rates. Neither were the town's two public schools in Campbell Street and Liverpool Street, which enrolled 170 and 74 pupils, respectively.[24] The seven private schools assessed varied widely in their valuations, from £18 for Martin Ladds' Bathurst Street school to £130 for that in Macquarie Street owned by John Ingle and occupied by Rev. Buckland. One of the seven, owned by the Infant School Committee in Murray Street, was presumably that founded in Liverpool Street in 1832 by the Infant School Society with a commendably catholic intake and the patronage of the town's leading ladies.[25]

The Residential Function and Functional Zones

The largest part of Hobart Town land in 1847 was of course taken up by residential property. Nearly three-quarters of the functional units were houses and together they accounted for 55 percent of rateable values. In only five of the 110 occupied blocks was there no residential component at all, while in 25 blocks all the property was residential,

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21 M.C.I. Levy: Governor George Arthur, p. 208 (10)

22 J. Wood: Van Diemen's Land Royal Kalendar, 1847, p. 86

23 Ibid., 1849, pp. 89-90

24 op. cit.

25 M.C.I.Levy: op. cit., p. 209

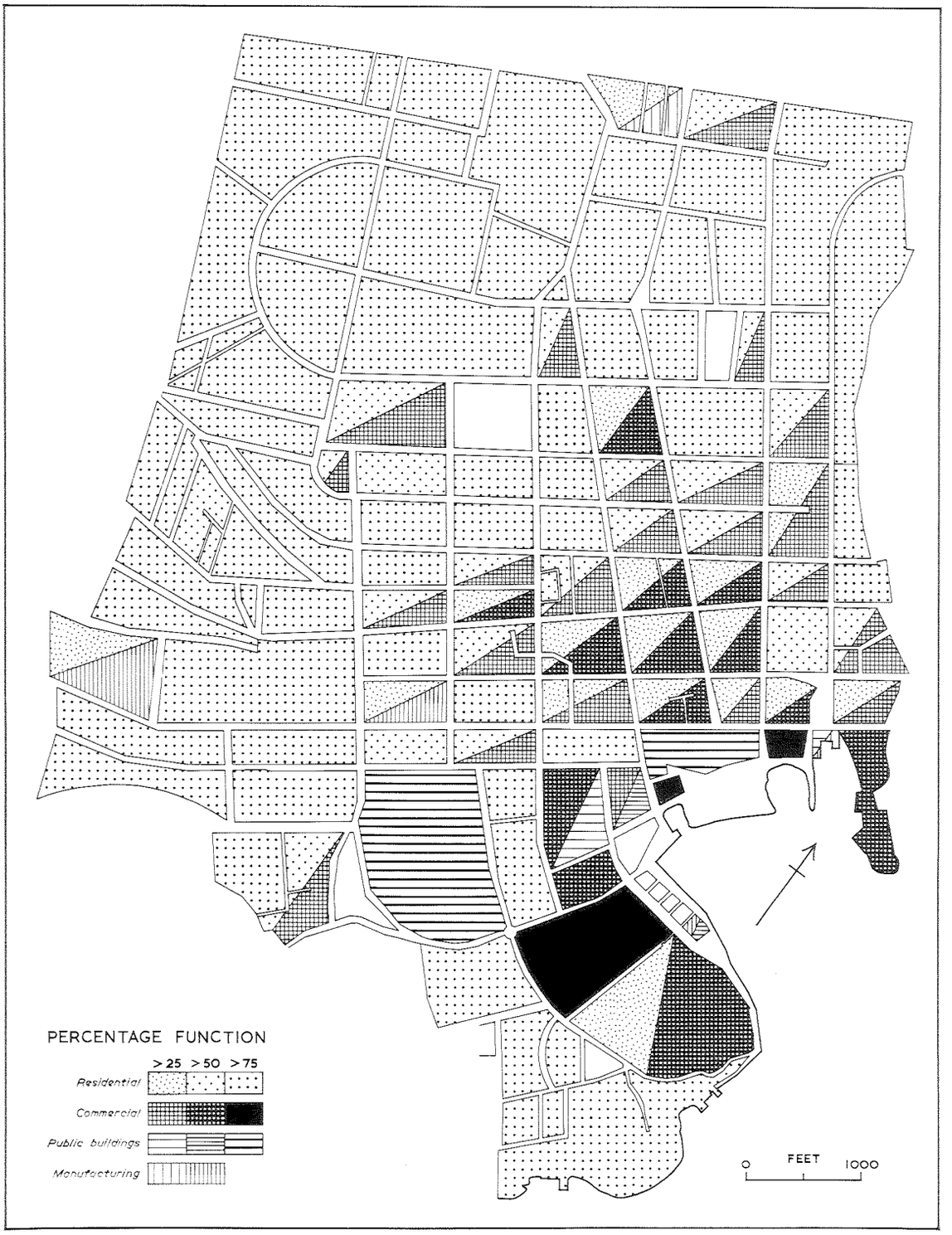

Fig. 3.4 Distribution of functions with more than 25 percent of block valuations, 1847 (Assessment Lists, 1847)

and in a further 56 more than half the total block valuation was in housing. Thus, despite the moderate dissemination of the shopping function beyond the inner area of greatest commercial concentration in the now sizeable town, there was a wide band of dominantly residential property around the bulk of the non-residential functions. Although the map of block average valuations (Figure 2.4) is suggestive of this distribution it was thought that the position would be clarified by separation of the major functional categories on one choropleth distribution. This is attempted in Figure 3.4 using functional proportions of block valuations. Numbers of units could have been employed, but the valuation basis provides a weighting which recognises with apparent consistency differentials in the size and importance of unit functions.

It can be seen that no more than two of the broad categories together occupy more than 25 percent of total valuation in any block. Three is of course the limit, which could only be extended by lowering the 25 percent threshold and permitting more complex combinations. In fact, as already discussed and as Appendices I and V show, one function, most often the residential, tends to dominate block composition. In relation to hypotheses of urban growth the pattern of Figure 3.4 appears to favour the concentric zonal arrangement of functions rather than any other. However, the present aim is the examination of the pattern as it was, and consideration will be given the manner of its development at a later stage.

Finally, in connection with the function and value of Hobart's property in 1847, the two bases of analysis are combined in the descriptive model of Figure 3.5. This represents a generalisation of characteristics discussed in this and the previous chapter which may assist in later analysis of change and in the possible application of the findings to other examples of urban evolution; and thus to an understanding of the principles or processes involved. To take just one question that is posed by Figure 3.5: will the juxtaposition of medium and even high-value residential sectors with shopping and warehousing zones continue as urban growth proceeds? The several major forms of activity whose growth, stagnation or decline will bear

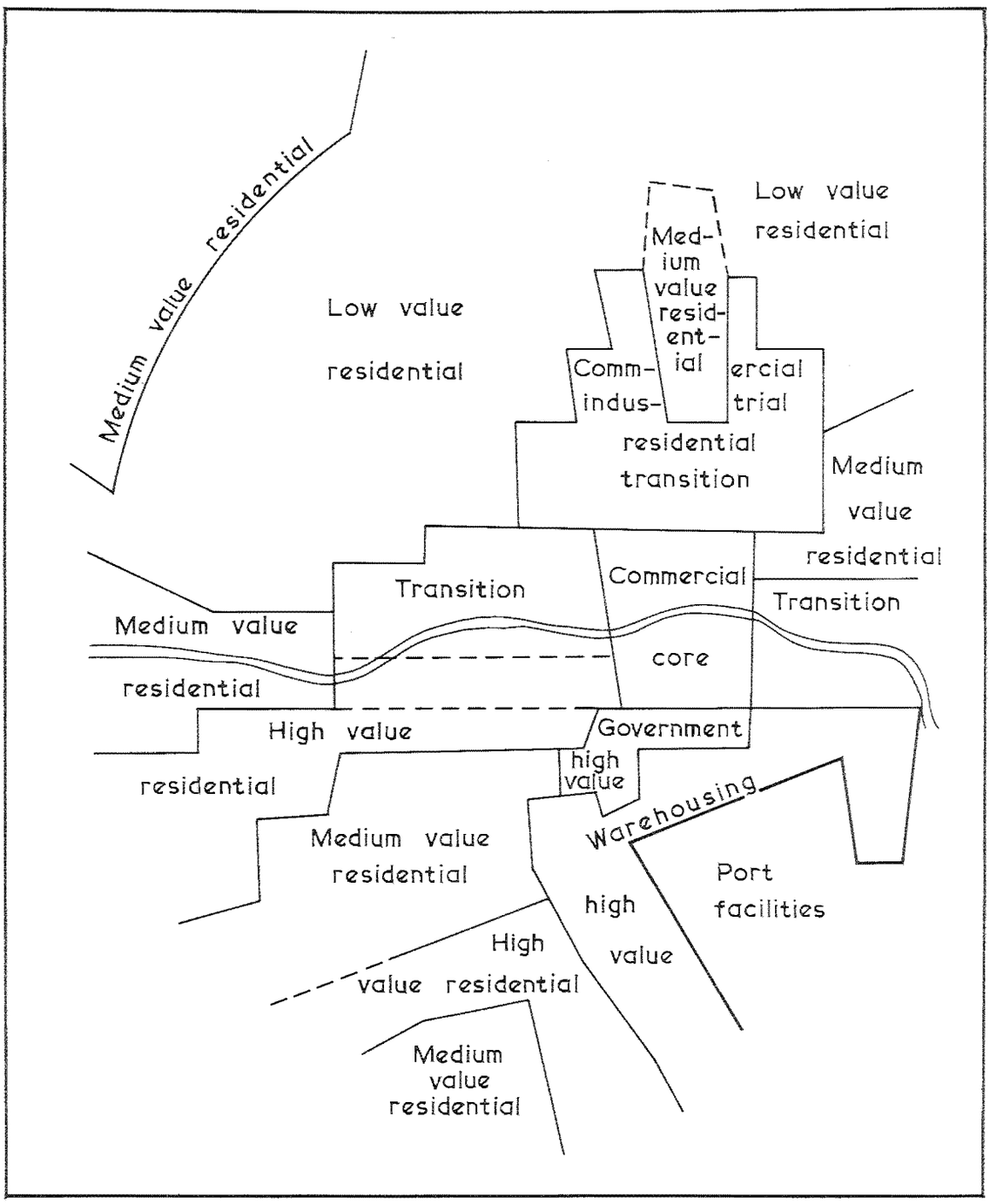

Fig. 3.5 Model of Hobart's urban structure in 1847 derived from the distribution of dominant functions and property values.

upon such questions have been examined in their areal distributions in and about the year 1847 — with one exception: the port, through which the colonial town maintained its external commercial and administrative connections, and in the immediate vicinity of which much of the daily activities of Hobart Town took place. The physical character of a harbour and its installations does not lend itself to a valuation essentially concerned with inhabited buildings, and as the area is also absent from the record of Sprent's survey we must turn to other evidence of the rôle of Sullivan Cove. This is the subject of the next chapter.

References Chapter 3

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(5) Dorothy Davis: A History of Shopping, London, 1966

(6) J.B. Jefferys: Retail Trading in Britain 1850-1950, Cambridge, 1954

(7) Charles Dickens: Sketches by Boz, London, Fireside edition

(8) R.M. Hartwell: The Economic Development of Van Diemen's Land 1820-1850, Melbourne, 1954

(9) J. Wood: Van Diemen's Land Royal Kalendar and Almanack, 1847, 1849

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Chapter 4

The Port and External Relations

Whatever else they criticised for its inadequacies Hobart's visitors and sometime residents waxed eloquent over the appearance and capacity of the port and harbour. From Lieut. Collins' "most highly favourable" verdict on the settlement's situation in 1804,[1] to Butler Stoney's "commodious cranes and deep wharves afford every facility to lading and unlading merchandize"[2] in 1856, the praise was consistent. As late as 1877 Sir Charles Du Cane told a British audience that "the special harbour of Hobart Town, I have been assured by naval Officers, is without rival in the world for its combination of extent, safe anchorage, and accessibility in all weathers."[3]

More specifically, despite problems of reduced capital inflow following the collapse of the late 'thirties boom, the foundations were laid in the 1840s for a port structure which was to last for a century. The southern shore of the Cove had been partly developed in the 1830s as New Wharf, and the clear task ahead was the development of the western shore, behind which lay the functional core of the town. Plans for reclamation and construction were produced as early as 1828, but not until 1839 did the work whose progress is illustrated in Figure 4.1 begin. One advantage of delay was that Governor Denison was enabled to take an engineer's interest in the project, which resulted in the provision of Constitution Dock for the use of small craft. By 1850 the new western shoreline was established as Franklin Wharf but only one section just south of Fisherman's (now Victoria) Dock had been timber-decked (Figure 4.2). This was the base from which finger piers were soon to grow, but in 1847 the western shore was s-building and the port's traffic had mainly to rely on the two sides rather than the head of the cover. Nevertheless, the enthusiasm with which the development was promoted through the 1840s must

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1 Lieut. Collins to Lord Hobart, 6.8.1804, CO 201/35, Public Record Office, London, p. 176 (1)

2 H.B. Stoney: A residence in Tasmania, p. 13 (2)

3 Sir C. Du Cane: Tasmania - Past and Present, p. 5 (3)

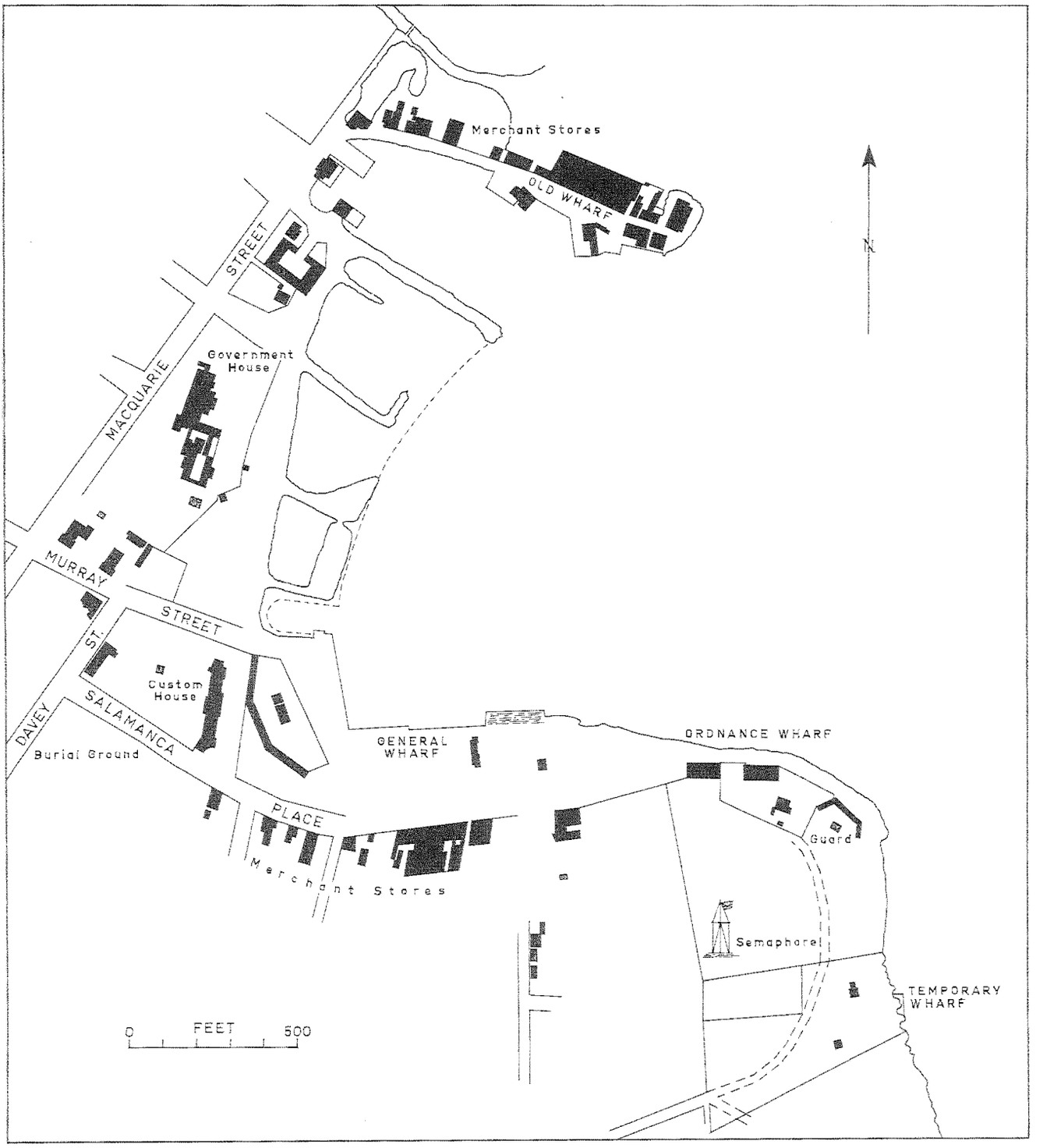

Fig. 4.1 Reclamation in progress at Sullivan Cove, November 1840 (Hobart No. 19, Lands and Surveys Dept.)

have engendered confidence within the town and interest among the shipping fraternity using the port's facilities. Denison may be allowed to speak for himself:

> "There is a splendid harbour, well sheltered from every wind; plenty of water for any vessel, room enough for the whole British Navy. Even alongside of our wharves, we have from 20 to 25 feet at low water and seven or eight fathoms at 100 feet out with good holding ground. However, no wind ever blows in the harbour to affect a vessel, or try the holding power of its anchors or cables. I have turned my engineering knowledge to some account, having extended the wharves, made a basin with 8 to 12 feet of water for small river craft, and thus extended the accommodation of the port very much. The number of vessels trading to Hobart Town is daily increasing: we sent out last year 37 whalers, and shall probably in another year or so fit out a hundred. Shipbuilding is going on, on a large scale; vessels of 600 tons have been built, and a great number of from two to three hundred and upwards."[4]

In 1847 some 367 interstate and overseas ships totalling almost 60,000 tons entered the port of Hobart (5). This was the largest number ever to that date, but also the largest since 1842 owing to the affects of the early 1840s recession. The tonnage level of 1842 was not in fact recovered until 1849. However, from 1847 onwards into the 'fifties the traffic progressively increased in frequency, though the average size of vessels calling declined through the decade (Table 4.A). The increased proportion of ships of less than

Table 4.A

Hobart Shipping Arrivals 1837-1852

Year	No. of ships	Tonnage recorded	Average tonnage per ship	Size Composition %				
				100 tons	100-199	200-499	500-999	1000-4999
1837	129	28,377	220	15	30	54	2	-
1838	186	43,882*	238	16	26	53	5	-
1839	207	45,764	221	30	18	49	3	-
1840	217	44,471	205	30	24	43	2	-
1841	271	53,745	198	30	30	36	4	-
1842	311	65,815	212	31	28	37	3	1
1843	151	32,371*	216	24	31	41	4	-
1844	232	47,513*	207	29	44	20	6	1
1845	263	49,228	188	36	34	24	5	0
1846	225	39,025	174	40	34	21	5	-
1847	367	59,612	163	44	32	21	3	0
1848	383	61,900	162	44	33	19	4	-
1849	398	65,941	166	41	35	19	5	-
1850	412	78,151	190	34	40	19	7	0
1851	486	87,563	181	24	51	21	4	-
1852	453	88,124	195	15	58	22	5	-

* Tonnage not recorded for two ships in 1838 and 1844 and for one in 1843.

Source: Reports of Ships' Arrivals (5)

4 Denison to Admiral Beaufort, 5.2.1849; quoted in A. Rowntree, p. 101 (4)

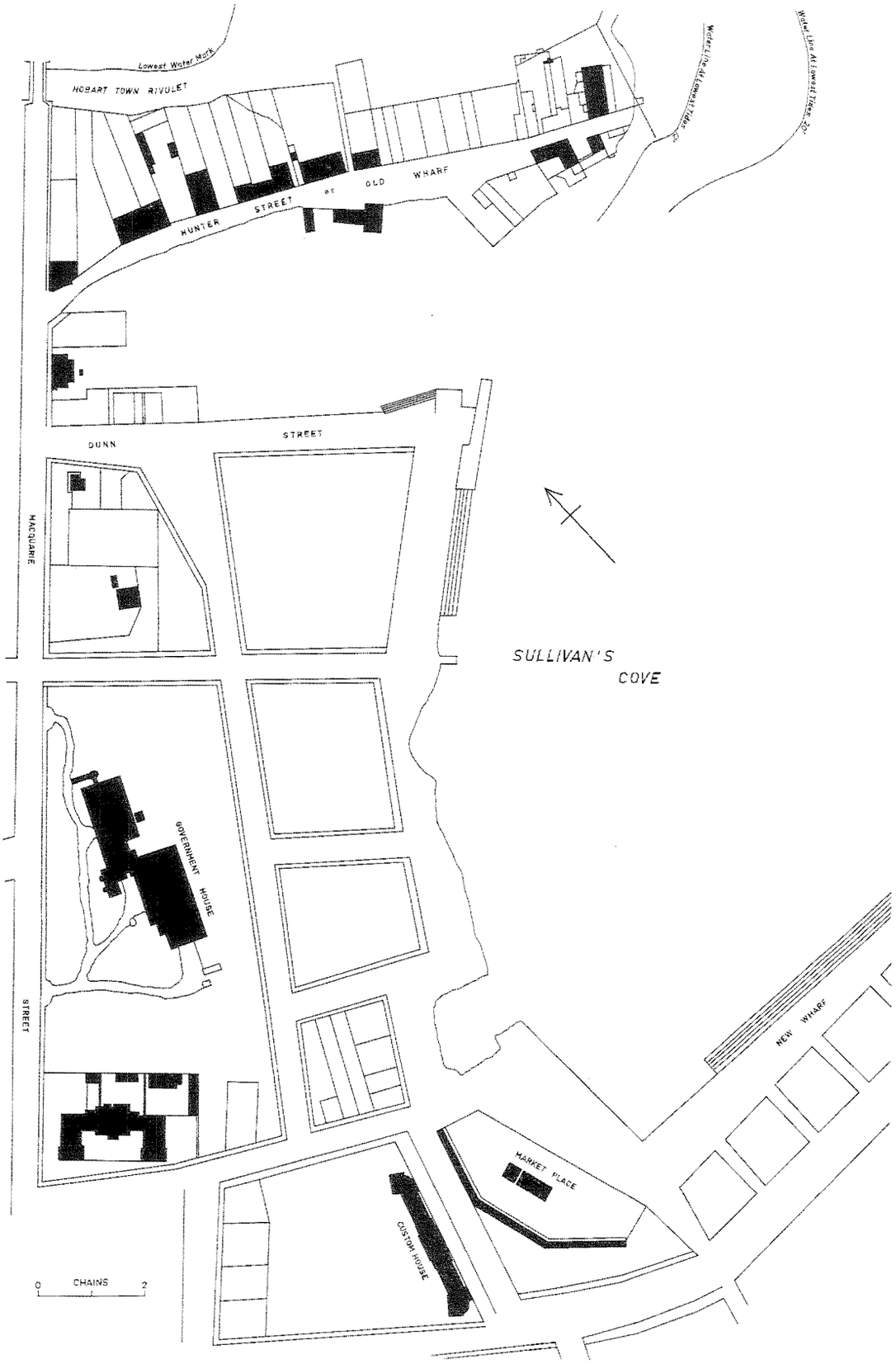

Fig. 4.2 Structure of the port in 1850. Progress of reclamation and timber facing of wharves can be seen by comparison with Figure 4.1 (Hobart Nos. 39 and 40, Lands & Surveys Dept.)

100 tons is noteworthy, for it implies a reduction in the overseas component which continued after the recovery in both numbers and total tonnages.

Perhaps as a complement to the mid-decade decline in external arrivals, which sometimes made coastal calls, coastal traffic between Hobart and Launceston increased steadily through the 1840s. The more likely reason for heightened intrastate activity was as a response to the growing population and production in the north of the island and the beginnings of general settlement along the northwest coast. In fact the largest number of coastal movements in the period 1841-48 was 51 in 1843,[5] the year in which "the depression reached its depth", according to Hartwell (7). However, compared with 28 inward and outward sailings in 1841 numbers were still high in 1846 (43 sailings) and 1847 (41 sailings), and tonnages grew from 2,136 in 1841 to 5,396 in 1847.[6]

With a total inwards movement of nearly 400 ships in 1847 the port was a busy place. This frequency of traffic meant that there would normally be several ships in port, since turn-around was slow and the rate of arrival was better than one per day. Illustrations of the port in the 'forties bear out this general appearance of activity, as exemplified in Figures 1.26, 1.27 and 1.29. The next things we need to know are what the ships were carrying and with which parts of the world they were the means of linking Hobart.

Origin of Shipping: Previous Ports

The official statistical compilations show only the annual numbers of ships calling. By using the individual forms lodged with the port authorities by each ship on arrival, rather more information can be obtained: the name of the ship, its net tonnage, its port of registry, the previous port of call, and the general nature of the cargo carried. There are no comparable documents available for departing ships.

Since Hobart Town was a British colony, dependent upon Britain

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5 Statistics of Van Diemen's Land, 1842-48 (6)

6 Ibid.

not only for goods, settlers, and administrative funds and instructions but for a convict labour force, we might well expect an overwhelming dominance of that connection. For the first decades of settlement it was so, though mainly at one stage remove, via New South Wales. By the 1820s the connection was more direct and in 1827 one-third of the ships entering the port were straight from British ports, with a similar proportion having last called at N.S.W. By the 1840s Victoria had replaced N.S.W. as the main Hobart foreland,[7] with Port Phillip and Port Albert (on the Gippsland coast, south of the Latrobe valley) playing a dominant part. The rise of the Victorian connection is seen more clearly in Table 4B, culminating in the extreme emphasis of the

Table 4B

Previous Port of Call of Ships Arriving at Hobart

Year	Australia (percent)					Beyond Australia (percent)					
	Vic.	NSW	SA	Tas	Aust.	G.B.	NZ	Asia	Pacific	Americas	Other
1835	3.1	34.6	-	15.9	54.9	23.5	1.3	7.1	1.3	3.1	8.9
1841	36.8	17.0	4.8	1.0	59.9	19.8	3.0	1.8	3.3	4.0	8.3
1847	50.1	9.3	5.4	1.4	66.2	9.0	3.5	4.3	7.6	5.4	3.8
1854	69.8	11.8	1.7	0.6	83.9	9.4	1.1	1.0	0.6	1.1	2.9

Source: Reports of Ships' Arrivals (5)

gold-rush 'fifties. A very few ports together accounted for the vast majority of Hobart's direct maritime links in 1847. The addition of Sydney, Adelaide and London to the two Victorian ports above left no more than 30 percent of the total direct sailing links with a handful of other shipping terminals such as Hong Kong, Manila, Wellington, Mauritius and the South Sea islands. In 1847 the Hobart arrivals represented about 60 percent of Tasmania arrivals, though a somewhat higher proportion of total tonnage. In this regard it was midway between the position in the 'thirties when 80 and even 90 percent of shipping came to Hobart, and the 'seventies when the port's share dropped below 40 percent.

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7 G.G. Weigend first discussed this term in relation to areas of connection across maritime space in Geogr. Rev., 42, 1952, pp. 660-662. (8)

Ports of Registry

Further light may be thrown on Hobart's external relations by examination of the ports of registry of the carriers which maintain the port-foreland connections. While being far from a conclusive indicator in themselves, these data can be viewed with advantage in conjunction with previous-port-of-call records, especially in the absence of the more revealing detailed cargo movements. The previous port details imply a relationship between one port and another, but do not always indicate the area of trip origin. The port of registry goes some way towards bridging this gap, by establishing a complementary connection between the ships of specified countries and a particular port. (With the advent of flags of convenience this source of information would need to be approached with additional caution). As in the case of the previous ports, the relative decline of the British connection between the 1830s and the 1850s is shown in Table 4C, using selected years.[8] Its position was entirely taken over by Australian

Table 4C

Port of Registry of Ships Arriving at Hobart
(percentage of total)

Year	Aust.	N.Z.	G.B.	W. & S. Europe	Asia	Americas	Other Areas
1835	26.2	—	66.1	—	2.7	3.8	1.1
1854	77.6	0.5	18.1	1.6	—	2.1	0.2

Source: Reports of Ships' Arrivals

ports, the only other area to provide a fairly constant if minor flow of ships being the Americas, mainly the U.S.A.

Commodity Movement

It is well known that the volume and type of cargo are more quantitatively useful than the number and size of cargo-carrier in the analysis of port functions. The most desirable data are, unfortunately, not always on record for earlier times, and even quite recently volume of cargo may not be identifiable by area of origin or

8 Sample years for which the data of individual ship arrivals were compiled and analysed were chosen after inspection of annual ship numbers and tonnages and calculation of average ship size for every year from 1804 to 1961. The chosen years are generally representative of a decade or more of trade and traffic growth or contraction, as there were few abrupt changes in traffic volume. The two years in the Table are those most relevant to conditions in 1847.

destination. For Van Diemen's Land there is a long record of import and export values, but not volume or origin or destination; and Hobart's share of the total trade is only sporadically available. In order to give some meaningful picture of commodity composition and the association of cargoes with particular forelands, the arrival reports were further scrutinised.

Thus, Table 4D is derived from treating each reference to a cargo commodity as one cargo unit, irrespective of carrier size, since that could not be assumed to have the same influence on the size of each different commodity shipment as upon the (also unknown) total annual cargo volume. The number of cargo units exceeds the number of ship arrivals, since more than one class of commodity may be brought by a

Table 4D

Composition of Inwards Commodities by Frequency of Arrival
(in cargo groups, including passengers)

Year	Percentage in Group Number									Number of Cargo Units
	1	2	3	4	5	6	7	8	9	
1835	35.3	21.3	13.7	4.3	0.9	16.1	4.0	-	4.6	329
1854	32.7	26.2	6.5	1.3	2.4	25.7	2.3	0.7	2.1	899

1. Passengers & convicts
2. General cargo
3. Foodstuffs (barley, flour meat, rice, salt, sugar, tea, wheat, wines)
4. Whale & seal oil
5. Wool, hides, tallow
6. Livestock (cattle, sheep, horses)
7. Coal
8. Limestone, phosphate
9. Timber, slates, iron

Source: Reports of Ships' Arrivals

single carrier; against which some ships arrive in ballast and do not contribute to the cargo totals.

The similarity of the cargo group distribution between the two years is noteworthy, particularly as 1854 was a boom year for traffic and recorded an all-time high of cargo units. However its main abnormality lay in the shipment of people outwards, and the kind of imports required did not greatly change. There were within-group changes of course, the most notable being a reduction of convict arrivals: 18 groups in 1835 compared with 98 arrivals of "passengers"; three in 1854 and 291 passenger groups. "General cargo" is an unsatisfactory label, covering goods sometimes listed as "sundries" and probably

including baggage, implements and other small packaged goods. Foodstuffs and livestock combined were in frequency of arrival second only to human cargoes in both years, which coincides with the view of a still-developing colony not yet self-sufficient but able to trade grain and animal products for sugar, livestock, and manufactures.

In Table 4E the leading commodity origin associations are shown, again for two years before and after the late 'forties. When

Table 4E

Commodity-Origin Rankings of Hobart Imports

Year	Rank of Association Showing Percentage of Total Unit Shipments			
	1st	2nd	3rd	4th
1841	Passengers- Melbourne 13	Sheep Melb. 11	Passengers Britain 8	General Cargo Britain 8
1854	Passengers Victoria 15	Ballast Vic. 13	General Cargo Vic. 13	Sheep Victoria 9

Source: Reports of Ships' Arrivals

one port is exclusively responsible for the shipments of a particular commodity that port is named, as with Melbourne; when other ports in the same political unit contribute, the designation is generalised, as with Victoria. What the table reveals is exceedingly clear: the development by the 1840s of at least as strong a relationship between Hobart and Victorian ports as the previous port data suggested. This does not seem a striking development, considering the relative proximity of Victoria to the southern colony and knowing the present strength of Tasmanian orientation. But when it is recalled that the Melbourne settlement was only founded from V.D.L. in 1835 and that the Victorian gold bonanza had to await the second half of the century, the rapid supplanting of British and N.S.W. forelands by Port Phillip and Port Albert during the 1840s was a phenomenon worthy of note.

Although primary documents for outgoing cargo movements are not available, the almanacs of the time carried lists of departures, with destinations and the nature of cargo carried. A reasonably authentic summary can thus be given of export traffic "not inclusive of colonial vessels on Australia and New Zealand" (9). What the exclusion of

Table 4F

Structure of Outward Shipping from Hobart 1.1.47 - 1.12.47

Number and Tonnage of Ships by Area of Destination

	Pacific (incl. South Seas)	Britain	Asia	South America	U.S.A.	Mauritius	Austr. N.Z.	Total
No.	43	17	7	6	1	2	26	102
Ton.	10,456	7,835	2,321	1,521	236	442	9,625	32,436

Source: Wood's Van Dieman's Land Royal Kalendar, 1848, pp. 260-266 (9)

local traders from this table emphasises is the substantial part played by inter-colonial (now interstate) trade in total shipping movements. Whereas 367 ships of more than 59,000 tons total arrived from inter-state and overseas, only 102 (totalling 32,000 tons) departed as non-colonial vessels. Even allowing a margin of error in the record, perhaps associated with New Zealand for which only one overseas ship was bound, the data make sense. The overseas ships accounted for more than half the total tonnage, but less than one-third the numbers. Their average net tonnage was thus 318, compared with 163 tons for all those arriving. Even within the overseas departures the size of ships varied noticeably. Of those bound for London or other British ports only one was less than 300 tons compared with six over 500 tons; their average was 461 tons -- small enough in any event. The ships bound for the Americas and Mauritius were generally smaller, while those to the South Seas, Pacific islands, China, and southern Asia included traders under 100 tons and many vessels of less than 200 tons as well as those which seem representative of the British merchant fleet of the day.

Forty percent of the cargoes were listed as "general" and nearly all those to the South Seas (whalers?) were "stores". Examples of the traffic cycle are:-

ship of 375 tons bearing general cargo from London, returning thence with general cargo;

ship of 534 tons bearing prisoners and stores from London departing with the troops to Launceston;

ship of 130 tons bringing sugar from Manila, taking out general cargo to China;

ship of 90 tons carrying oil and bone from the South Seas, returning thence with stores;

ship of 286 tons bringing rice and gunney from Calcutta and Madras, departing with general cargo for Sydney;

ship of 141 tons bringing cattle and sheep from Port Albert, taking general cargo to Callao.

From several pieces of individually incomplete evidence the pattern of Hobart's external contacts should now be reasonably clear: strong links with Britain, and British ships still important but waning as intercolonial connections develop rapidly; Victoria the leading foreland even before the gold era; consistent though not necessarily frequent trade with Asian, American and Pacific ports; a fair variety of cargoes, despite the impenetrability of the general cargo designation, but decided emphasis on a few categories; strong identification of certain types of commodities with specific origins and destinations, for example sugar from Mauritius, whale oil from the South Seas, general cargo to Sydney, London.

Imports and Exports: Commodity Structure

The main statistics by which the relative importance of the exports and imports traded through Hobart can be assessed are those of value. Quantity is a preferable measure in terms of the mechanics of trade, since low-value bulk goods can have a considerable impact on port facilities while contributing relatively little to the money economy. Most of the value tabulations, relate to V.D.L., but occasional entries are made for Hobart, which, when considered in conjunction with even

Table 4G

Value of Imports and Exports, Hobart and Launceston, 1847

Area of Origin or Destination	Exports (£)			Imports (£)		
	Hobart	L'ton	V.D.L.	Hobart	L'ton	V.D.L.
Great Britain	200,234	138,375	338,609	400,307	117,479	517,786
Brit. Colonies	102,886	154,239	257,125	98,959	63,417	162,376
U.S.A.	—	—	—	5,840	—	5,840
Foreign	4,562	580	5,142	29,956	8,635	38,591
Total	307,682	293,194	600,876	535,062	189,531	724,593

Source: Wood's Tasmanian Royal Kalendar, 1849, p. 139 ff.

more occasional records of quantity, indicate rather less inferentially than previous data the commodity structure of cargo movement.

As a general basis of the enquiry Table 4.G shows the value of imports and exports through both Hobart and Launceston in 1847. In this year Hobart handled 51.2 percent by value of the V.D.L. exports and 73.8 percent of the imports. Britain maintained a clearly dominant position in value of trade, particularly in imports where high-value manufactured goods effectively outweighed the diminishing British proportion of total sailings. Hobart's share of total imports and exports should be remembered when examining the following table of the island's leading trade commodities in 1847 (Table 4.H).

Table 4.H

Value of Major Trade Commodities for V.D.L., 1847

Exports

V.D.L. Total (£)	Percentage of Total Value				
	Wool	Whale Oil	Flour	Grain	Timber
600,876	41.1	10.5	6.8	4.1	2.6

Imports

V.D.L. Total (£)	Percentage of Total Value							
	Wool-lens	Liquor	Sugar	Appa-rel	Hard-ware	Cottons & Linens	Haber-dash-ery	Live-stock
724,593	14.9	11.4	7.1	6.7	5.7	4.9	4.7	3.9

Source: Wood's Tasmanian Royal Kalendar, 1849

This is essentially a simple pattern of trade, as might be expected of a young colony with new lands, a small labour force and little capital. The dominance of wool in the composition of exports is a notable feature not previously revealed by generalised cargo categories. The flourishing whaling industry is likewise reflected, and the product of the mills which figured prominently in manufacturing activity takes third place among the exports. Rather less than 20 percent of the 1847 grain export value was in barley, a little over 20 percent was in oats, and the major portion was wheat. Whereas exports were dominated by primary products, the import structure consisted substantially of manufactures

not easily produced, or insufficiently produced, in the primitive manufacturing environment of the town. Clothing or the wherewithal to make it actually exceeded 30 percent of imports in the table, and the addition of hats and leather for footwear (in one form or another) boosts the figure further. The viability of the many taverns earlier discussed is explained by the quite enormous expenditure on alcohol, the term liquor here combining rum, malt liquor, brandy and wines. And this takes no account of home brews. Large imports of sugar were necessary in the absence of local or even inter-colonial production, with Mauritius and Manila being prominent suppliers. The need for hardware was of course basic, and the existence of small foundries was still inadequate to supply expanding household, agricultural and manufacturing requirements.

Altogether 57 categories of imports and 51 of exports were listed for 1847. None had a larger share in the value of trade than those tabled above. More than 40 items accounted for the remaining 35 percent of export values and a similar number for the 40 percent of import values not tabled. Some of the commodities were included in both halves of the trade pattern, but in a state of unbalance. Thus $7000 worth of whale oil was imported, but $63,000 worth exported, the product of the local industry boosted a little by purchases from other operators. Oilman's stores were the next largest import after those tabled, with $27,000 value and 3.8 percent of the total; $5000 worth of these were passed on, presumably to one of the sister colonies. Other items which deserve mention as indicative of the settlement's (and s') needs were canvas and bagging — 3.3 percent of imports, tea — the same proportion, glass and earthenware — 2.8 percent. Books and stationery and tobacco were the only other goods to exceed two percent of import values, silks and rope each contributed more than 1.5 percent, followed by millinery, beef and pork, copper and lead, boots and shoes, each with over one percent. Cottons and linens were the only item other than those tabled to exceed two percent of total export values, and they were presumably re-exports. Ironmongery and hides, skins and leather were next in importance, slightly strengthening the representation of first-stage manufactures, but leaving the pattern of primary product exports substantially intact (Appendix XIII).

Within the overall V.D.L. structure Hobart's share would of course have varied from product to product, and commodities having a low value per unit volume could well be excluded from a value-based analysis. A little additional light can be thrown on these imponderables from a source which has already proved a useful supplement to the official statistical record (10).

Table 4 I

Staple Articles Exported from V.D.L. 1846 & 1847

Commodity	Unit	1846		1847	
		Hobart	Launceston	Hobart	Launceston
Potatoes	tons	89,628	1,529	219,193	1,157
Flour	"	1,686	1,981	1,066	2,611
Bark	"	31	362	71	297
Wool	bales	6,768	6,841	9,658	6,971
Hides etc.	"	1,125	320	945	175
Wheat	Bushels	62,123	367,421	33,242	394,520
Oats, barley	"	20,319	38,604	19,145	34,278
Horns	number	10,073	8,000	8,089	9,325
Laths, shingles	"	2,410,000	268,891	5,117,000	430,370
Palings	"	133,270	406,193	519,000	791,637
Staves	"	124,179	800	153,000	500
Sawn timber	feet	1,127,587	134,437	2,577,000	95,150
Whale oil	tuns	1,581	62	1,760	38 1/2
Whalebone	"	54 1/2	1 1/2	32	3/4
Fruit & Preserves	packages	1,997	2,745	1,618	3,610

Source: Wood's Kalender, "Account of the staple articles exported from V.D.L., years ending Jan. 5th, 1848", 1849, p. 157

From this it can be seen that wool exports were fairly balanced between the two ports, that whaling products were almost wholly Hobart shipments, and that grain was heavily associated with Launceston while timber was equally an export of the south. The fact that potatoes were an important constitutent of Hobart's, and indeed V.D.L.'s, export structure is revealed; in terms of value they represented a mere 0.67 percent of total exports in 1847. Potatoes have long since ceased to be associated with agricultural production in the Hobart hinterland. Their mid-century role in the port's traffic places them firmly between early grain production on the lands east of the Derwent valley (before the transfer of emphasis to the Launceston hinterland) and the rise of orcharding south of Hobart in the last quarter of the century.

Intra-Island Connections

It is doubtful if the importance of Hobart's overseas relationships in and around 1847 can be over-stressed, but it should be remembered that the town did not exist in complete local isolation: it was, as the title of Part 1 suggests, the primate settlement of an island area which had alienated four million acres of land, ran nearly two million sheep, and carried 50,000 inhabitants in addition to the 20,000 in the urban environs of Hobart. As yet the pattern of communications was quite simple. The northwest coast was just being opened up, and what has become Tasmania's settled arc was merely a settled axis. With development having occurred almost simultaneously in the north and the south, the main need for contact had always been, and at mid-century remained, the linking of Launceston on the Tamar with Hobart on the Derwent.

This was achieved both by land and sea. We have already seen that coastal shipping services were not notable for their frequency, but some interstate and overseas vessels added to the numbers. It was, of course, a ridiculously long journey compared with the land route (Figure 4.3), Launceston being about 40 miles inland and Hobart being an equal distance north of the Tasman Peninsula, which had of necessity to be rounded. However, time and seamen's wages were less restrictive influences than a century later, and the then road carriers were quite unsuited to move goods in substantial quantities. In any case the coachman's job was no sinecure with the road rising to 1700 feet in the southern one-third of the journey; and since it was a "turnpike" a toll was collected at New Town on Hobart's outskirts.

Even some of the mails were still carried by sea in 1847, but by the end of the 'forties the Royal night mail plied the overland route four times per week in addition to the six times-weekly day and night coaches and Sunday's Comet (11). Into the 'fifties (and perhaps longer) the journey seems to have taken 12 hours, though much time was lost at the stages, the road itself being "perfect; the London and Bath or Brighton roads, in their best days, were not better".[9] Mundy, a better observer than most, recalled that travel time was

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9 G.C. Mundy: Our Antipodes, p. 522 (12)

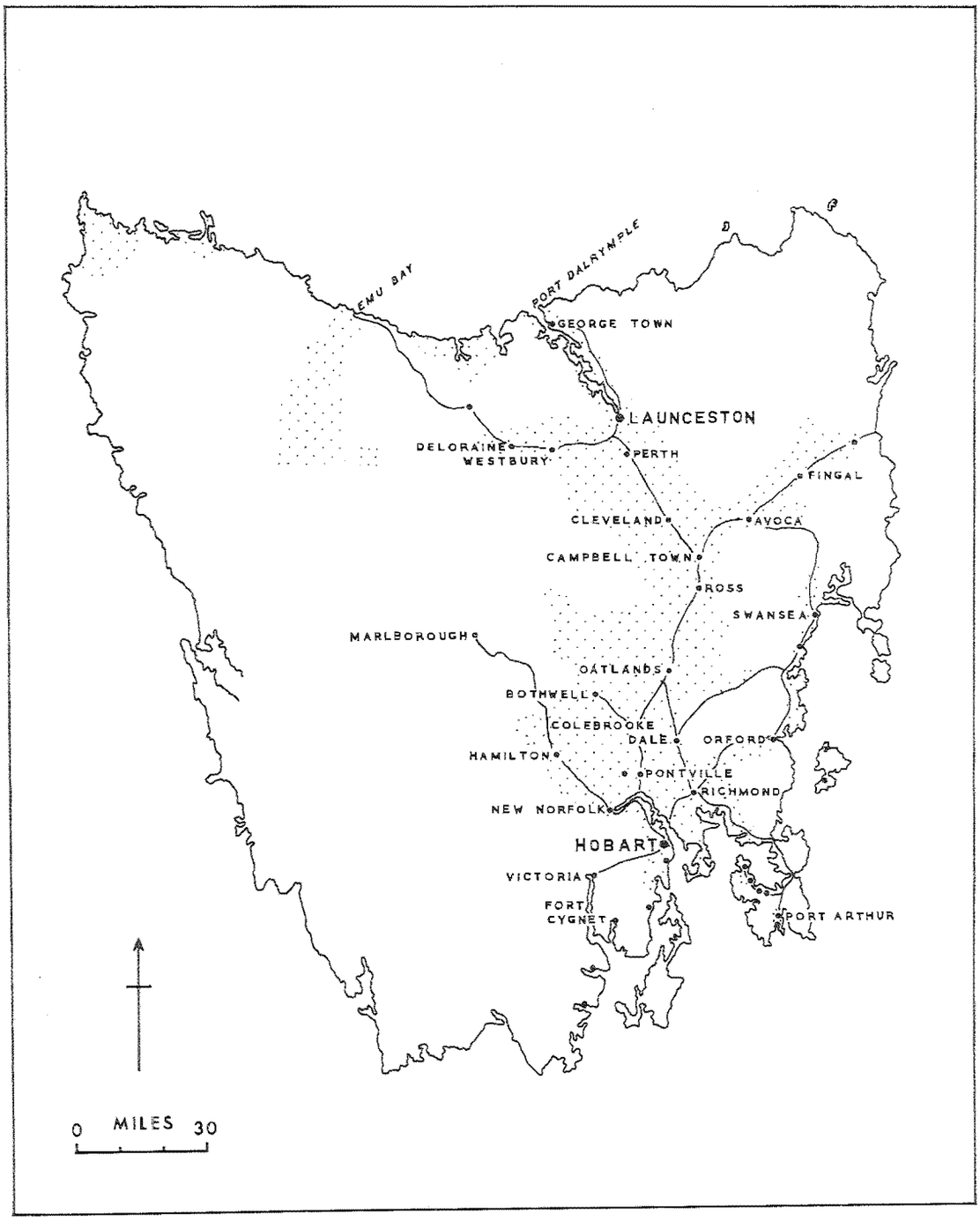

Fig. 4.3 Main routeways and probation stations in V.D.L. 1845. Dotted areas indicate main tracts of alienated land by 1854 (MPG 709/1, Public Record Office; map of Land Alienation, Atlas of Tasmania, p. 42. Facsimiles of Crown-copyright records in the Public Record Office appear by permission of the Controller of H.M. Stationery Office.)

two days in 1835 and an outside place cost £4, so conditions had much improved when the coach line could advertise "a bed, a glass of Old Tom, a cup of coffee, and an outside place — 120 miles — for 5 shillings". The opposition was less flexible, offering "inside £1; outside, cash, 5/-; credit, 15/-, and that only to responsible parties."[10]

Apart from the several intermediate townships[11] thus in regular communication with Hobart (Figure 4.3) there was a separate day coach to Oatlands, another ran six days per week to Green Ponds, and additional daily services linked New Norfolk, Richmond and Brown's River (Kingston) to Hobart.[12] From the administrative if not the public viewpoint the most important connection after Launceston's was almost surely that with Tasman Peninsula and the Port Arthur penal settlement. The movement thence of convicts and their keepers and most of the stores to sustain the population of 3,000-odd was enabled by the weekly sailing of the "Lady Franklin".

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10 G.C. Mundy: op. cit., pp. 520-1

11 After passing Bagdad, the Jordan River, Jericho and Jerusalem, Mundy complained that the River Styx "has by some means found its way into this Van Demonian Palestine" (p. 523).

12 Wood's Royal Southern Kalendar, 1850, p. 29 (11)

References Chapter 4

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(11) Wood's Royal Southern Kalendar, Tasmanian Register, and General Australasian and East Indian Official Directory, Hobart and Launceston, 1850.

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Chapter 5

Population, Society, and the Urban Entity

The role of any settlement in the development of a wider area, region, or state depends upon many things, some intangible others measureable but few unchanging. Though the data may be elusive the nature of rural development can be reduced to fairly simple terms: land alienation, legislation and occupation; crop and stock production; capital availability; land quality and accessibility; environmental influences; ownership structure (the list grows). Urban centres (the word is heavily suggestive) have developed the complexities of all concentrations, wherein the behaviour of the individual component may not greatly differ from its rural counterpart, but taken with its numerous fellows in close inter-relationship and at higher pressure (or density) if not higher temperature, the problems of analysis or assessment become daunting.

Nevertheless, numerous theorists and practitioners presently study the economic, sociological and administrative problems of contemporary urbanism,[1] while the dearth of attempts to assess the contribution of developing towns to developing regions is remarkable.[2] It is true that several of Mumford's works (3, 4, 5) and those of others such as Schneider (6) and Cornish (7) have in their breadth of scope stolen something of the historical urban generalists' thunder, but to make my meaning clear, there are practically no parallels to the numerous studies, especially American, of the (rural) frontier. The American frontier was essentially concerned with cattlemen and sheepmen, covered waggons and Indians, trails and railroads: the opening up of vast horizons and the imprint of the mental attitudes involved on the character of the American people. For this Frederick Jackson Turner (Hollywood and the Westerns' authors aside) has received the main historical credits and minor discredits, in that order (4, 8, 9). The Australian

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1 There is little point in naming references from this vast field; *vide* any modest library.

2 Dickinson's systematic studies of the city in relation to the region are outstanding exceptions to this generalisation. *City Region and Regionalism* was published in 1947 and replaced in 1964 by the larger *City and Region* (1, 2).

situation, with fascinating comparability of scale and physical environment, and even of period, shows in its greatly lesser documentation similar tendencies. Roberts' path-finding history of land settlement (10) was followed by his work on the squatting era (11) after those of Price (12) and Fenner (13) on South Australia, and when the historical geographers took up the settlement process in substantial fashion thirty years later it was on related themes. Of Meinig (14), Perry (15) and Heathcote (16) only the first was at all concerned with urban contributions to the frontier.

Thus (at least to this extra-American observer, who may have missed on-the-spot portents) it was Richard Wade's The Urban Frontier that heralded a new era. He began: "The towns were the spearheads of the frontier. Planted far in advance of the line of settlement, they held the West for the approaching population."[3] That was not quite the case in Australia, except for a few mining centres, and it could easily be maintained that Hobart and Sydney are the counterparts of Boston and New York rather than Pittsburgh, Cincinnati, Lexington, Louisville and St. Louis. But the town does not have to stay on or beyond the farthest limit of general rural occupance of the land to influence the settling process, and the point to be made is this: that there is a real need for studies of Australian urban development (whether coastal or inland) in the context of its influence upon regional settlement and growth.

What, it may be asked, has that to do with the present investigation? This study is basically intra-urban, although external relationships are not entirely ignored for the influences are reciprocal. It is believed that the establishment of the internal patterns and processes set the stage for studying in turn the inter-urban and urban-rural interplays as primary objects. In setting one such stage the manner in which local conditions parallel the better prepared American scene is striking; this time, Richard Wade's last words:

> "Secondary works on early Western urban life are, paradoxically, both abundant and scarce. They are scarce in the sense that few

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3 R.C. Wade: The Urban Frontier, p. 1 (17)

> comparative studies have yet appeared; abundant in that each town has its own history written many times. The latter efforts have been largely by amateur historians who have brought both affection and insight to the study of their own communities. While these accounts are valuable, they are usually unsystematic and often 'dated' by the circumstances of their publication. Professional historians, on the other hand, have generally concentrated on a particular aspect of a single city's development."[4]

Much of this writing, Wade's included, has concerned the condition of the population, changing culture, urban society, "the better life": social history. The interest in people is understandable and justifiable for there is ample modern evidence to suggest that their responses, abilities and vitality are not entirely controlled by the chance availability of material resources within the home area. Thus we cannot leave Hobart in its mid-nineteenth century garb without more positively probing some aspects of population and society. Their total condition undoubtedly played an important part in the future development both of the town itself and the hinterland which it influenced. Most of the data relate at best to the town as an entity, though spatial variations are exposed where possible.

Population Size and Structure

The Census of December 31, 1847 showed the V.D.L. population as 70,164. They were comprised of the socio-occupational categories

Table 5.A

VDL Population at the Census of 1847

Designation	Males	Females	Total	% of VDL Total
1. Born in colony	9,138	9,217	18,355	26.2
2. Free immigrants	7,391	6,427	13,818	19.7
3. Freed prisoners	8,832	2,687	11,519	16.4
4. Ticket of leave convicts	4,749	965	5,741	8.2
5. Govt. employed convicts	8,660	1,098	9,758	13.9
6. Privately employed convicts	7,278	1,438	8,716	12.4
7. Military	1,765	481	2,246	3.2
8. Aborigines	15	23	38	.05
Total	47,828	22,336	70,164	100

Source: Wood's Tasmanian Royal Kalendar, 1849, p. 153 (18)

4 Wade: op. cit., p. 345

indicated in Table 5.A. The best figure that can be put forward for Hobart at the same date was the Police District's 21,467. The town thus contained approximately 30 percent of the colony's people, but the proportion was probably not constant for all groups. At the end of 1848 there were 778 officers and men housed in the barracks and three warehouses,[5] and as the total number of troops in the island was little different then than in 1847 it seems that Hobart had rather more than its share. However, for the main components it is not possible to say just how strongly they were represented, except that most of the female convicts were incarcerated or assigned in the Hobart area.

The unbalance of the sexes is striking. Even among the free population the reasonable balance between males and females in the immigrant and native-born groups was disrupted by the lack of balance in the ex-prisoner population. Thus only 42 percent of the 62.3 percent who were free people were females, a sex ratio of 138. Among the convicts a mere 14.5 percent were females and only in the tiny aboriginal remnant (of perhaps 3000 people on the advent of European settlement) were females in a majority. It is therefore something of a testimony to the procreative abilities of the population, and in particular the female minority (32 percent overall) that more than one-quarter of the colony's inhabitants were native-born barely a generation after its founding and despite the wholesale introduction of emigrants -- settlers, convicts and military.

It is not possible to assess what proportion of the women contributed to the number of people born in the colony. More than half the people in that category, since it included those by then as old as 43 years, could have been contributing to its own proportion of the total. Nor is it possible to exclude the convict-women from assisting the colony's natural increase. Leaving aside the circumstantial evidence of their British and shipboard record, they were by no means incommunicado on arrival in Hobart. They were not subjected to such severe discipline as the males, and even the worst-behaved in the 'twenties were accessible to their friends,

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5 Statistics of V.D.L., 1848 (19)

in the flimsy Factory which adjoined the Murray Street gaol (20). The much improved female House of Correction (in the Rivulet valley) which replaced it had weaning-yards as well as work-rooms, and the establishment of the Orphan School at New Town was a direct reflection of the Government's concern (21) for the "illegitimate progeny of the convict women."[6] However, too much should not be made of this contribution to the total population, for the female convicts were but a small part of the whole and their specific confinements gain a notoriety from their general confinement out of proportion to their demographic worth.

One firm figure on which we can reasonably rely is that people born in the colony had increased by 5,631 since the 1842 Census.[7] Thus the 59,000 inhabitants of 1842 had added 5,631 surviving births over deaths in five years. Assuming a crude death rate in the order of 20 per 1000 for the 12,724 of the born-in-colony group of 1842 and for the added young children who survived infancy, together with an infant mortality rate probably double that, there would have been 6000 new additions by native births during 1842-47. An average of 1,200 or more births per annum from a population which averaged 64,000 is remarkable only for the low rate of 19 per 1000. But the unusual composition of the population must be considered in so far as the statistics allow. The official statistical returns (22) show that of 64,179 bond and free population in 1847 only 17,603 or 27 percent were married persons.[8] This may be compared with the 66 percent of Tasmanians over age 15 who were married in 1961 (23). Since 33 percent of the population was then under 15 years, approximately 44 percent of all Tasmanians are now married, or 1.6 times the 1847 proportion. In these terms the effective birth rate in 1847 can be regarded as nearer 30 than 20 per 1000, which

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6 M.C.I.Levy: Governor George Arthur, p. 160

7 Wood's Tasmanian Royal Kalendar, 1849, p. 153

8 The figure of 64,179 in Statistics of VDL 1847, is composed of 43,730 free population, which is exactly the total of groups 1, 2, 3 and 8 (free Europeans plus aborigines) in Table 5A, and 20,449 convict population which excludes 3,739 convicts at punishment stations included in group 5. The military population is also specifically excluded from the Statistics figures. The total of 64,179 is, however, the precise number which is broken down into age components in Wood's Kalendar, shown in Table 5B.

better reflects the times and the general trend of social commentary relating to Hobart's part in them.

The breakdown of the 1847 V.D.L. population (or most of it) into age components is of interest, though not entirely comparable with more recent quinquennial groupings. The 16 percent of the population

Table 5B

Age Composition of V.D.L. Population 1847*

Group (years)	Males	Females	Total	% of V.D.L. Total*
Under 2	1,790	1,788	3,578	5.6
2 - 6	3,389	3,443	6,832	10.6
7 - 13	3,134	3,001	6,135	9.6
14 - 20	2,804	2,272	5,076	7.9
21 - 44	26,205	9,493	35,698	55.6
45 - 59	4,078	1,532	5,610	8.7
60 & over	924	326	1,250	1.9
Whole Pop'n	42,324	21,855	64,179	99.9

* Excluding convicts at punishment stations, and military.
Source: Wood's Tasmanian Royal Kalendar, 1849, p. 153

aged six years and under is a high proportion, about two percent higher than at present. The whole of the born-in-colony 1842-47 increase would be contained in the two groups concerned, but that still leaves the considerable number of 4,000 or so who must have arrived as very young immigrants. The very great discrepancy between male and female numbers in the broad group 21-44 years reaffirms the view that the achievement of even a modest rate of natural increase at that time was notable. It is also striking that less than 11 percent of the total population was 45 years or more, in contrast to 26 or 27 percent over a century later. Relatively as many of the present population are 60 years and upwards as were over 45 in 1847. Increasing longevity is the general explanation, but in Hobart and V.D.L. the penal and pioneer characteristics of the colony clearly affected representation, especially of the usually strong female component, in the higher ages. This meant inevitably that a high proportion of the total population, males especially, was in the working age groups, which is appropriate

to a newly developing settlement though the structure itself does not ensure that numbers of productivity are sufficient for the tasks to be undertaken.

By the end of the 1840s Hobart was reaching a population plateau, the significance of which in subsequent decades will be considered later. About 30 years after establishment the steep growth rate characteristic of many young settlements began to level out, but the graph continued to climb through the latter 'thirties and the 'forties (Figure 5.1). It became clear that the island as a whole was diverging from the capital's slowing growth rate as settlement outside Hobart and Launceston gained momentum, particularly in the northern coastlands west of the Tamar. It was also clear, as possibly never again to the same degree, that administrative and social impetus emanated from the seat of Government beside the Derwent.

With the Governor's holding such personal authority, his presence in Hobart combined with historical advantage and the outstanding harbour to give Hobart Town a distinct leadership in most fields of activity. However, not all circumstances were superior, and the rapidly developing connection with Victoria outlined in Chapter 4 favoured the northern settlements rather than the south. Fortunately for Hobart's competitiveness, its harbour access and lay-out were not equalled by the Tamar, either at or leading to Launceston, so that the northern port's advantage of locational proximity was substantially nullified. More important, perhaps, was the fact that despite certain primitive characteristics in detail, Hobart Town was now part of a "self-assertive colony with an agricultural and pastoral economy",[9] which had not long since deserved description as a prison farm on a subsistence basis (24). As far as the town was concerned, what might be described as thriving commercialism and subsistence manufacturing plus shipbuilding could be added to its economic attainments. What this meant in terms of urban society was important.

Societal Components

In 1820 54 percent (nearly 3,000) of the total V.D.L. population

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9 R.M. Hartwell: Economic Development of V.D.L., p. 11

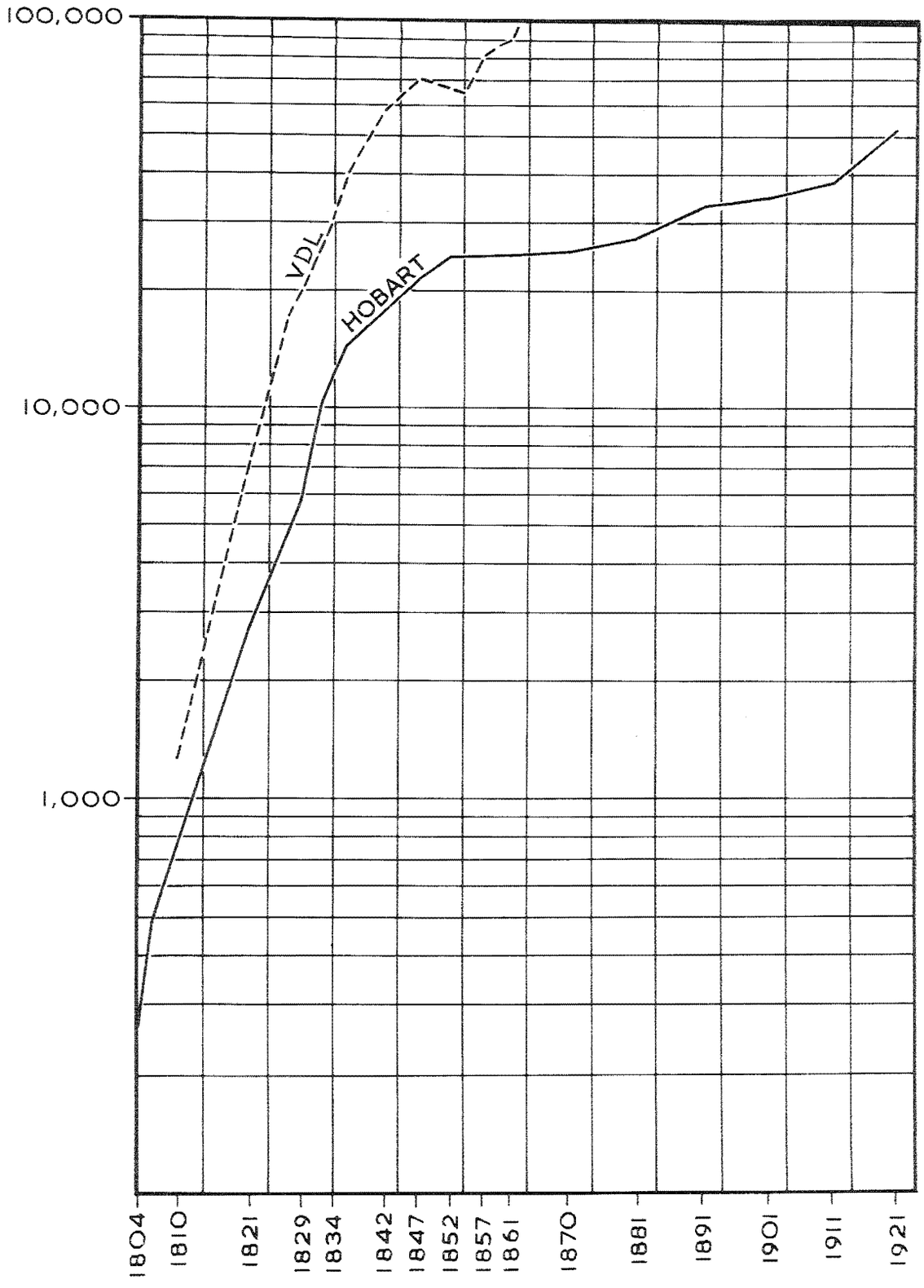

Fig. 5.1 Nineteenth century population growth of Hobart and Tasmania. The rate of growth of the capital began to diverge from that of the whole island in the 1830s as settlement outside Hobart and Launceston gained momentum. (Census, Blue Books, almanacs)

were convicts (25) and many of the remainder were military officers, troops, and civil administrators concerned essentially with the operation of the penal system. Fewer than a thousand free settlers existed to give any real semblance of 'normal' social composition. The effect, therefore, of reducing the convict element below 35 percent by 1847 (Table 5A) must have been profound. Also, having put upwards of 3,000 out of sight, if not out of mind, at Port Arthur further reduced the somewhat depressing atmosphere of large-scale gaoling. Additionally as far as Hobart was concerned the cessation of the assignment system in which the less felonious convicts were placed in private service, by the probation system which excluded those allowed in private service from the townships,[10] must have diminished further the recognisably convict element. Since 12 percent of the population were recorded as convicts in private employ in the 1847 Census (Table 5A) this was a regulation of some impact.[11] Apart from the probationer pass-holders who were privately employable, others were collected into gangs for carrying out public works. During the early 'forties economic recession made it difficult to provide finance for this activity[12] but their use from 1845 seems mostly to have escaped the contemporary painters and engravers of the daily scene, even granted that many were engaged on farms and country roads.

Another aspect of social composition that should not be overlooked is that 16 percent of the 1847 population (Table 5A) were former prisoners who had been pardoned, and the further 8 percent holding tickets-of-leave were on their way to freedom. It is difficult to assess just what influence this had upon Hobart society. Certainly some of the ex-convicts rose to positions of social respectability, as instanced by the brewer to whom Mrs. Prinsep referred,[13] though in the late

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10 Hobart Town Gazette, 30.9.1842 and R.M. Hartwell: op. cit., p. 79

11 The best indication of the former prevalence of transgressors of the British law among V.D.L. households comes from the 1837 Census of New Town, where 195 households averaged 2.2 convict servants (26).

12 R.M. Hartwell: op. cit., p. 81

13 A. Prinsep: Journal of a Voyage...., p. 70 (27)

'forties increasing employment opportunities saw the ex-convict last preferred and thus "free to starve while the probationers got food and lodgings at the Government's expense."[14] Undoubtedly there were many undesirables among the convicts, but others, such as the Dorchester Labourers (Tolpuddle Martyrs), were certainly no worse than their unconvicted fellows (28). In the context of the necessarily resilient, often tough, and infrequently genteel members of V.D.L. society it seems unlikely that the ex-convicts produced any significant deterioration of the whole.

Between the Governor and the leading administrators at the head of society and the convicts who were paying their debt to it (or rather to the mother society in Britain) were the settlers of some substance, such as the leading property owners, and those with little or no capital backing.The increasing class of mechanics joined with shop assistants and domestic servants to make up much of the latter group in Hobart. The welfare of the employee group fluctuated with the rate of immigration and the demand for labour, but as the labour supply generally increased the wage-rates tended to decline from the 'twenties to 1847. Thus in Hobart bricklayers received 4s. 11d. per day and carpenters, masons and plumbers received 4s. 10d. per day in 1847 (22). In 1842 the first two trades had commanded 7s. and the last two 8s., and twenty years previous 11s. or 12s. had been paid for mechanics' labour. Because the money rate was higher than that in Britain, employers appear to have been unsympathetic to petitions against declining wages.[15] Although there is little evidence of resulting destitution there is no doubt that the constant influx of new immigrants and the competition of the convict labour force made things difficult for at least the less skilled artisans. Despite which, the towns even then had their attractions, and rural demands for mechanics were not always fulfilled. One response to uncertainty was the formation of benefit societies or trades unions from 1836, and in 1847 more than half a dozen were in existence, including the Hobart Town Mercantile

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14 R.M. Hartwell: op. cit., p. 83

15 Hartwell (24), p. 85 ff. and Levy (20), pp. 287-9 provide well documented accounts of this subject.

Assistants' Association, the Hobart Town Carpenters' and Joiners' Benefit Society, and the Van Diemen's Land Boot and Shoemakers' Benevolent Society.[16] It will be recalled that the Mechanics' Institute was listed as occupier of the Melville Street Wesleyan Hall in the 1847 valuation.

At the higher economic levels of the free settler component of society there were decorous parties and entertainments on special occasions which stood in some contrast to the widely reported predilection of the lower orders for the grog-shops and taverns. One of the few places where a wider cross-section could meet was the Theatre Royal, then 'The Royal Victoria', which operated with considerable success despite what has been described as a poisonous atmosphere emanating from "stale tobacco smoke, foul breath, and unwashed, frowsy bodies."[17] It would, however, be unexpected to find the more important administrators, entrepreneurs and property owners of the colonial capital living cheek by jowl with the artisans whose houses valued at one-tenth or less of theirs, even if they all met on occasions at the theatre. With this in mind the distribution of residential quality is examined.

Residential Quality

The discussion of average property valuations relating to Figure 2.4 bore on the question of variations deriving from differential functional composition of the town blocks. To remove the varied influences of non-residential property the block averages were calculated for their residential content only and the averages ranked to give the distribution shown in Figure 5.2. Although the 5th quintile value of £36 is not particularly high in relation to the absolute maxima of more than £100 (and thus there is a wide range of values within the 5th quintile) it is clear that the higher value property was substantially nearer the commercial centre than the periphery of the urban area.

Expectedly, the highest rank was not generally to be found within the commercial zone, but two fairly compact areas in the 5th quintile

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16 R.M. Hartwell: op. cit., p. 90

17 M.C.I. Levy: op. cit., p. 297, quoting from unspecified source.

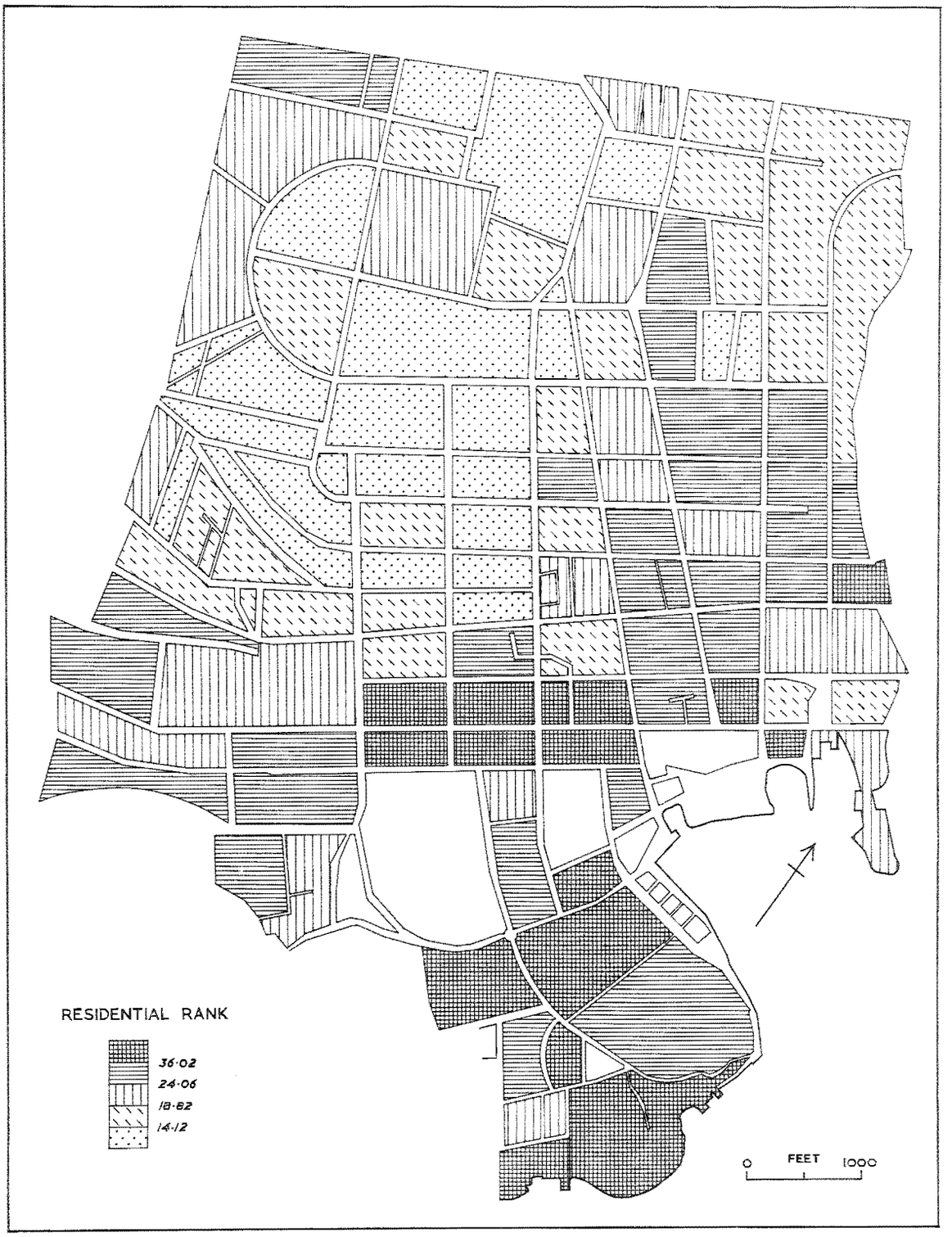

Fig. 5.2 Distribution of residential rank 1847, by blocks. Quintile values are in pounds (Assessment Lists, 1847)

are apparent. That which followed the Macquarie Street axis for three blocks on either side between Murray and Molle (Blocks 37, 38, 48, 49, 70, 71 in index Figure 2.5) is of particular interest. The street rose westward from about 50 to 150 feet in this vicinity; on the south, above the 100-foot level, was the Barracks, on the north the ridge fell away to the valley of the Rivulet. Thus we have a wedge of relatively high ground, abutting on to some of the leading commercial blocks on its townward end (and in fact with a minority residential share of total valuation in its eastern one-third), leading upslope towards commanding views of the town centre and river estuary, and adjacent to the important socio-administrative focus of the military headquarters. Judging by those remaining, this was probably the area of greatest concentration of two-storey houses in the colonial town, after the style of those in Figure 1.13 (one block further west), though a number possessed stone facades. As can be seen from the distribution of property units (Appendix V, Section 3, bottom two rows) the blocks were lightly but generally occupied, with noticeably wider spacing of the buildings than in most developed areas. This was probably the nearest Hobart equivalent to the 'town-house' concept of contemporary London or New York, where the brown-stones of mid-Manhattan or the Regency rows or crescents of Regent's Park derived status from architectural solidity, internal space, and proximity to business and entertainment areas rather than from spacious grounds which the very location for the most part precluded.

The second 5th quintile zone was not quite so homogeneous as the southwestern section, but covered a major part of Battery Point, a continuation of the barracks' ridge on the seaward side. While the general location overlooking the port and/or estuary was a distinctive one, having the quality of peninsular isolation as well as ready access to the town centre, the density of occupance was low (Appendix V, Sections 5, 6 and 13) and the development of less preferred sites could be expected to reduce the high rank of the area at a later stage.

The 4th quintile residential areas were associated with the business centre and its extension northward, and with the southwestern continuation of the Macquarie Street high-rank section. This latter was not quite so

convenient to central functions and included a wider range of house quality, including the row of Figure 1.14, so that the larger houses aligned to the broad roadway and eastern estuarine views of the Fitzroy Place and Garden Crescent frontages were somewhat offset. In the central district (Figure 3.1; also Appendix V, Sections 1 and 2) there were some quite substantial residences associated with shops, such as the Lewis & Sons building, but the high density dual function structures in the midst of commercial hubbub (such as it was) could not be expected to command valuations as high as for the large, exclusively residential properties. However, the distinction between this rank-area and the southwestern 5th quintile section is an interesting one and may be more a difference of degree than of kind. The presence of the prisoners' barracks in Block 105 did not inhibit the relatively good residential quality of that and adjoining blocks, which appear to have gained their attractiveness from rising ground, (from 25 to 100 feet) and from proximity to central functions without any major infusion of the same.

As in the average valuations of all property, the western and northwestern sections of the urban area contained the bulk of the less desirable residential property. Much of this zone was dominantly and even exclusively residential (Appendix V, Sections 9, 10, 11, 12) and its low rank can best be attributed to relative difficulty of access. While many sites provided sweeping views, somewhat distantly of the water however, the climb up routeways such as Forest Road and Molle, Barrack and Hill Streets was taxing for pedestrians and horse-drawn traffic alike. The rather low residential status of Blocks 108 and 115 between the wharves and the inundatable lower course of the rivulet is worthy of note. Row houses, factories and taverns marked the locality, and there is little doubt that mechanics and seamen rather than officers and merchants were its permanent inhabitants.

Residential property in the middle rank was widely, almost randomly, distributed. Of more than 20 blocks with average residential value between ₥18.6 and ₥24.1 no more than two were contiguous in any locality. There were a few blocks in or near the commercial core: along the

Elizabeth Street axis (Blocks 98, 82, 81); on the Liverpool Street axis (Block 68), and on the high side of the rivulet and lower Collins Street (Blocks 107, 114). Others were on the western periphery, just a sprinkling of moderately valued houses mainly above 300 feet elevation; and two small blocks among higher ranking areas on Battery Point were on the mid-slope at about 75 feet, between the hill capped by St. George's Church and the waterfront properties below Napoleon Street (Appendix V, Section 5).

Two influences seem clear in the overall distribution of residential quality (or valuation, if the two are not regarded synonymously): locational convenience to central functions, and site quality. In general residential valuation decreased outwards and it is evident that the greatest convenience is <u>at</u> the centre, but this has environmental limitations -- excessive noise, congestion, and architectural heterogeneity. So the best compromise between convenience of access and attractiveness of surroundings appears to have been found close to the centre on rising ground. The influence of site quality, particularly as it reflects elevation, is not conclusive in Hobart of 1847. As there was an increase in elevation in almost every direction from the commercial core and residential quality declined outward the distance factor may have been generally dominant. However, examples of contrasting rank in areas of similar access may be used to indicate that the site quality factor operated. The best instance is the considerable discrepancy between the status of the high-ranking Macquarie Street section (Blocks 37, 38, 48, 49) and the nearby blocks to the northwest. These (Blocks 34, 35, 45, 46) were on the other side of the Hobart Rivulet at similar elevation but <u>relatively</u> low-lying, dominated by the steep Knocklofty piedmont behind. Thus it appears that elevation was recognised as a desirable condition and that where unimpeded outlook, especially over scenic terrain could be coupled with avoidance of being overlooked, residential quality tended to be high. There was early recognition of these desirable features in Boston's Beacon Hill district (29), and more recently the relationship between relief and residential stratification has received renewed attention (30).

The subject will be later re-examined in the context of Hobart's development after 1847.

Hobart as a Geographical Entity

The several major aspects of Hobart's structure and appearance as a mid-nineteenth century colonial town have been explored with varying degrees of precision according to the nature of the basic information on record. Interpretation is never wholly eschewed even with reliable statistical data, and opinions have been expressed along the way concerning the normality, extent or viability of distributions, developments or achievements. It is appropriate at this point to summarise briefly the character of the settlement as an urban entity of about 20,000 people on the fringe of a largely unsettled land, facing the Southern Ocean and, except for even newer New Zealand, the furthest point on the long route east from Mother England.

First and foremost there were about 20,000 people, a figure surpassed a century later by fewer than twenty other Australian towns. They were housed in nearly 2500 private dwellings which ranged from cheap timber-walled, shingle-roofed shanty versions of the cottage illustrated in Figure 1.5 to more substantial and architecturally more homogeneous residences than are commonly built to-day. Lest the figures suggest that there were on average eight people per dwelling despite the small size of many houses, it must be remembered that the town's inhabitants were a very mixed bag. Possibly 20 percent were convicts serving out their punishment in one of several categories of control, though only a few hundred males and probably 500 females were actually confined to the several corrective institutions (the worst 3000 male convicts in the island were at Port Arthur). At the end of 1848 434 military officers and men lived in the Hobart Town and Anglesey Barracks and an overflow of 344 were housed in three waterfront stores at a rental cost of £355 (19). It seems that nearer 18,000 than 20,000 people inhabited the available houses, which means approximately seven per building. Almost the whole contiguously settled area was within a mile radius of the intersection of the two main commercial streets, Elizabeth and Liverpool, and as only about 1200 acres were occupied

the average density approached 10,000 per square mile.

The total annual value of property at the beginning of 1847 exceeded £100,000; the capital value was probably between 10 and 20 times that figure. There was significant areal differentiation of property valuations both by average and total of block contents, and the distribution of residential property was fairly well defined on a rank-value basis. Functional differentiation was also apparent both by value of property-type and by area, with a clearly recognisable commercial core adjacent to the port. Apart from public buildings and several banks the most highly assessed functional units were warehouses, largely located around the port, which received almost 400 vessels in 1847. The export of primary produce, especially wool, whale oil and timber, was still not sufficient to offset the value of imported clothing and manufactures in most years, but the trade of the town indicated a developing colony which was no longer primarily penal and in which the settlement process was outstripping the punishment function.

Capital was not abundant and the local administration had constantly to press for government funds for public works employing convict labour. However, one wing of the new barracks was commenced before the close of 1847 and the estimated £2,151-1-9 3/4 cost had already been spent in 1848; the new military prison was "constructing", with £1500 likewise expended; and most of the £4,850 earmarked for Franklin Wharf, the repair of streets, and the waterworks development in 1848 were expended in that year (19).

While 20 of Hobart's more successful capitalists owned one-quarter of the town's property as assessed and therefore paid rates of about £1,250 per year, mechanics "of several different skills" were earning less than five shillings per day and more than 150 taverns existed to help keep some of it from their families. On the other hand the churches were active, theatrical entertainment was well established and secular schooling was developing alongside the church schools. In other words, from a decidedly unpromising penal base the young town had developed many of the characteristics of 'normal' urbanism, and although "the colony [V.D.L.] retained until 1850 many of the features of a government

enterprise"[18] Hobart Town could reasonably be said to exhibit sufficient spatial, economic and social diversity and balance to deserve the description of colonial capital. That it did not greatly improve its 30 percent share of the island's mid-nineteenth century population serves to underline this early achievement.

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18 R.M. Hartwell: op. cit., p. 74

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Part 2

Evolution of the town: 1804-1847

"God made the country; man made the town"

- Cowper

"The place had a quiet sleepy appearance as if everything had been standing still and was waiting for settlers to come and improve it."

- Tales of the Colonies, 1843

The 'late Colonial magistrate', Charles Rowcroft, wrote the above lines of Hobart Town in about 1820. At that time the population numbered approximately 3,500 compared with David Collins' founding party of 262 in February 1804. Little development took place after Collins' death in 1810 until Sorell's improved administration began to take effect ten years later.

Based on Macquarie's plan of 1811 town-building was the order of the 1820s, fortified by a growing trade, an influx of settlers and convicts direct from Britain, and the stern but efficient administrative organisation of Governor Arthur from 1824. The report of the Land Commissioners added to Macquarie's earlier guidelines for urban functional components and locations, and by 1830 Hobart could show a level of growth which lost nothing by comparison with Sydney or contemporary western American towns such as Pittsburgh and Louisville after 25 years' existence.

The 1830s were a boom decade during which the pattern of the town as colonial capital was laid down and major buildings which are still features of the urban centre were established. The population quickly reached 10,000 in 1832 and 14,000 by 1837, after which growth to a district total of 21,000 by 1847 was more gradual. While the settlement remained primarily a penal colony throughout its first forty years, under the autocratic control of the Governor and his military, the development of civil institutions and of commerce, both internal and external, found in Hobart Town of the latter 'thirties and 'forties a greater normality of structure and society than the considerable, though minority, convict element of the population might suggest.

Chapter 6

The Foundation of Settlement

Despite the attractions of the Sullivan Cove environs the site of the settlement which was to become the capital and primate centre of Van Diemen's Land and Tasmania was not the first choice of the founders. Following the manifest interest of French navigators in southern V.D.L. (D'Entrecasteaux in 1792 and in 1793 explored the Derwent for 20 miles and named it Rivière du Nord; his historian-naturalist Labillardière devoted 160 pages to an enthusiastic description of Terre de Diémen's natural assets[1]) English interest in eastern Australia was reasserted. In 1794 Lieut. Hayes set out from India to explore the coasts of V.D.L. among others, and the sketch of his course and his findings (Figure 6.1) became a guide for others until the fine surveys of D'Entrecasteaux's team became known. It was Hayes who gave the Derwent its English name. Bass and Flinders in 1798 were followed in 1802 by Commodore Baudin who met Flinders, surveying the coasts of New Holland, off Kangaroo Island. Late in 1802 Capt. Robbins was sent by Governor King at Port Jackson to assert English rights in southern V.D.L., but after showing the flag to Baudin's party at King Island and the Frenchmen's sailing off to the west, he returned to Port Jackson via Port Phillip.

Thus it was Lieut. John Bowen who carried out Governor King's commission of March 28, 1803 to establish a colony at the Derwent in the vicinity of Risdon's Cove, there to clear ground and sow crops, prepare to lay out a town, and allocate 200 acres to each family of free settlers.[2] The party of 49 persons left Port Jackson on August 31 in the "Lady Nelson" and the "Albion", which anchored at Risdon Cove on September 7 and 12, respectively. It seems that it was Bass's

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1] J.B. Walker: The French in Van Diemen's Land, Early Tasmania, p. 8 (1)

2 Ibid., pp. 23-4

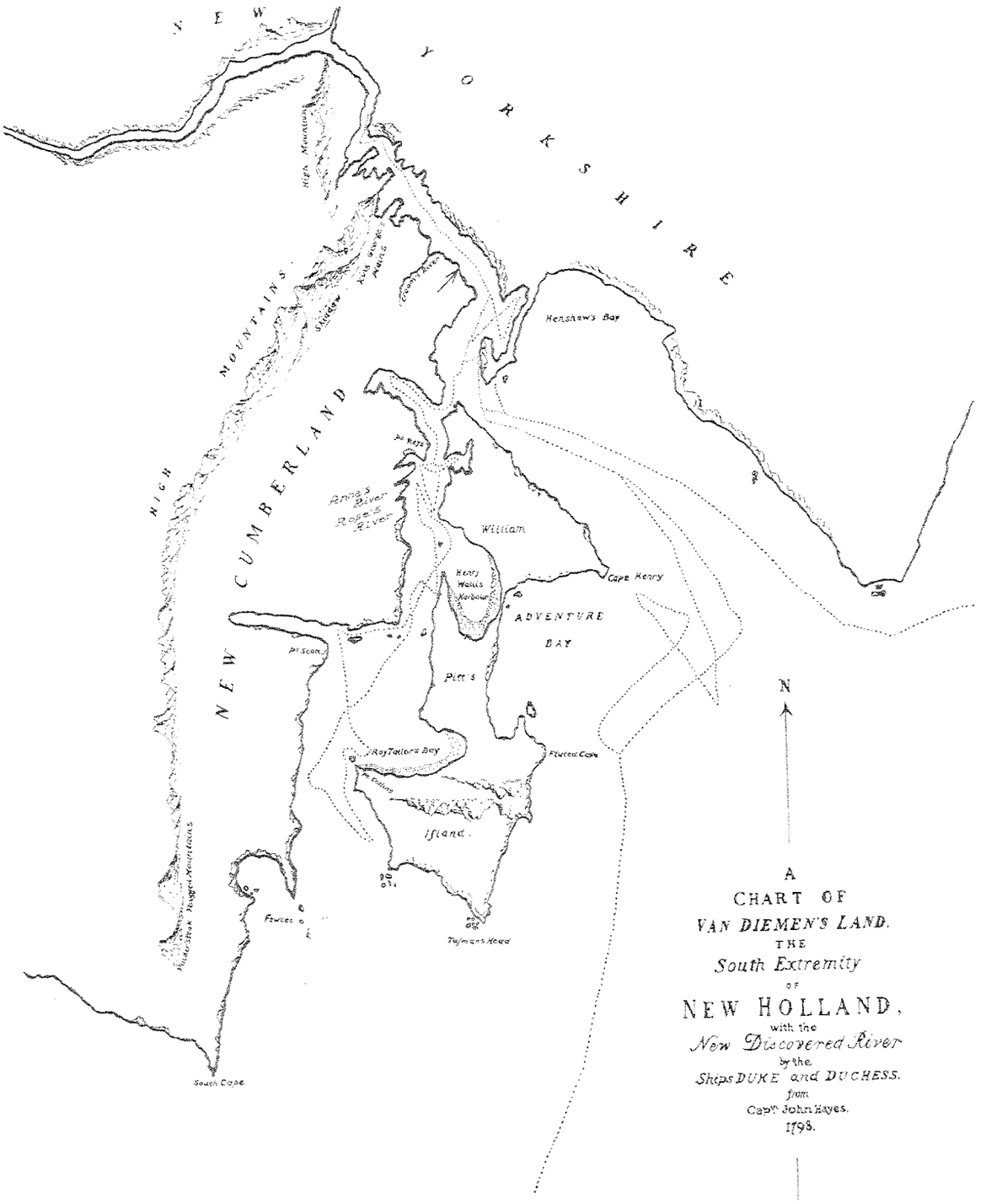

Fig. 6.1 Capt. John Hayes' Chart of the Derwent environs, 1798. The arrow added near Croom's River marks the approximate position of Sullivan Cove.

enthusiastic descriptions of Risdon in 1798 which influenced Governor King's choice of that vicinity for the settlement, but Flinders had been less impressed. Nevertheless, he wrote that "a ship may lie in Risdon Cove, out of the stream of the river, in from six to three fathoms, muddy bottom"[3] and that "the stream that falls into Risdon Cove, runs out of an extensive valley, that in the disposition of the ground, exceeds in beauty every other that was met with".[4] The navigators obtained water from the creek by rafting hogsheads into it at high tide, and although late rain had muddied the water it was "otherwise very good."[5] Bowen seems not to have questioned King's instructions sufficiently to make a competitive examination of the western shore, but as Walker pointed out, the ubiquity of thick scrub in the small valleys tributary to the Derwent would not simplify site selection.[6] Walker also suggested that the Cove was a good deal less silted up in Bowen's time than his (1889), but the marshy area pictured in Figure 6.3 seems little more extensive than that depicted by Bowen in his sketch of 1803 (Figure 6.2), despite the likelihood that some removal of timber must have increased the denudation of surface material. However, the Risdon valley does appear to have been singularly open and grassy, and fairly ready access to potential agricultural land may have weighed more heavily than a rather small anchorage. More important was the obviously restricted space for the expansion of a settlement (Figure 6.4), but Bowen was not asked to predict the future and probably had little reason for doing so.

Bowen named his little settlement Hobart, after the Secretary of State for the Colonies, and within a fortnight had soldiers and prisoners in huts and the free settlers about a quarter-mile up valley from his own tent (Figure 6.2). The tribulations of Bowen's colony need not be repeated here,[7] but little progress was made. Early in 1804

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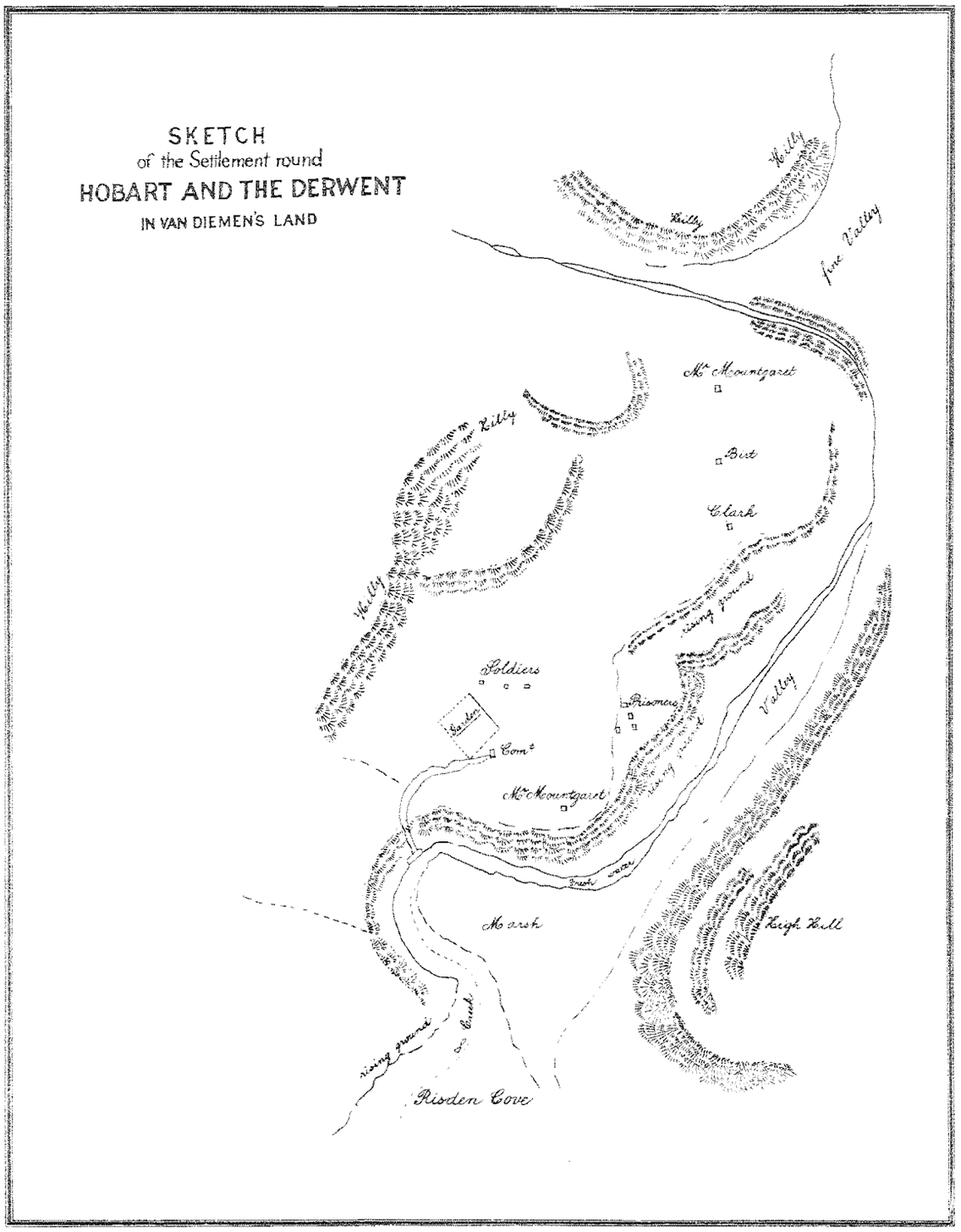
3 M. Flinders: Observations on the Coasts of Van Diemen's Land, p. 6 (2)

4 Ibid., p. 9

5 Ibid., p. 7

6 J.B. Walker: The English at the Derwent and the Risdon settlement, Early Tasmania, p. 38

7 See J.B. Walker: op. cit.



"Copy of sketch prepared by Lieut Bowen and forwarded by him to Governor King N.S.W. Wales in a despatch dated 27th September 1803 showing original settlement then known as Hobart situated at Risdon Cove."

Fig. 6.2 Lieut. Bowen's sketch of the Risdon settlement, 1803. Note the narrow valley and marshy estuary of the stream near its confluence with the Derwent at Risdon Cove (after the plan in Walker's Early Tasmania)

Fig. 6.3 The marshy area at the confluence of the Risdon stream and the Derwent, at the head of Risdon Cove, 1963.

Fig. 6.4 The Risdon valley from Bowen's Memorial, 1963. Seen from a point beyond the 'soldiers' and 'prisoners' locations on Figure 6.2.

Lieut.- Colonel David Collins arrived at Risdon by way of Port Phillip which he had found "wholly unfit for the settlement"[8] he was sent from England to establish, and after a survey of Port Dalrymple (Tamar estuary) in northern V.D.L. had discovered an entrance "only three fathoms water, in a very intricate, and narrow channel", with the further impediment (found in seeking to procure fresh water) of "large bodies of hostile natives".[9]

Collins had a better eye for a map than either Bowen or King, for he had already

> "conceived the local situation of the River Derwent more adapted for commercial purposes. Its position at the Southern extremity of Van Dieman's Land, gives it an advantage over every harbour yet discovered in the Straits, and I entertain a hope that when it is generally known, that an Establishment is formed, so directly presenting itself as a port of shelter to ships from Europe, America, or India, either for whaling, or other speculation, it will be greatly resorted to."[10]

The shortcomings of Risdon Cove were immediately apparent to Collins, who reported as follows:-

> "I found that the Landing Place in the Creek (for it is no more than a creek) was accessible only at a certain time of the tide, that to make the channel at all practicable for loaded boats, it would be necessary to remove one hundred and thirty, or one hundred and forty yards of mud, which from its being mixed with sand, would be always liable to break down and fill up the channel again. The situation of the Store House was so low that I should have dreaded the consequence of any very heavy rains, and must therefore have erected mine upon high ground."[11]

Collins lost no time in exploring the Derwent shores for alternative sites, and on 20 February, 1804 (five days after his arrival) the new Lieut.-Governor made camp at the mouth of a creek 8000 yards due south of Risdon on the western bank of the estuary.

Settlement at Sullivan Cove

The founder's appraisal of the permanent site of Hobart at Sullivan Cove has been oft-quoted, but bears repetition:-

> "In the Centre of this Cove is a small Island, connected with the Main Land at low Water, admirably adapted

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8 Collins to Lord Hobart, 28.2.1804, CO 201/35, Public Record Office, London, p. 76 (3)

9 Ibid., p. 67

10 Ibid., p. 76

11 Collins to King, 29.2.1804, CO 201/35, pp. 78-9

> for the landing and reception of Stores and Provisions. Round this Island is a Channel for a Boat, at the Head of which is a Run of clear fresh Water, proceeding from a distance inland, and having its source in a Rock in the vicinity of the Table Mountain, named in the French Chart 'Le Plateau'. The Ground on each side of the Run is of gradual ascent, and upon that next the Cove I have formed my Camp. The Ocean and the Lady Nelson are lying within half a Cable's length of the Shore in about Nine fathoms Water."[12]

Bearing in mind the requirements for initial settlement defined by Chisholm (5) and others long since, Collins' further assessment of site capabilities is pertinent:-

> "The soil, to one used to the sand of Port Phillip, appears in a very advantageous point of view, but is certainly the same as that about Risdon Creek. The timber and stone are in sufficient quantity, and quality to answer all my purposes; and I shall immediately set about the necessary work of getting my people under cover, and preparing the ground for the reception of seed."[13]

The Governor did not rely entirely on his own judgement, and before adopting the new site "took the opinion of such of the military and civil officers as were with me... and having the satisfaction of hearing them express the same favourable opinion.... no longer hesitated to abandon the idea of establishing myself at Risdon Creek."[14]

The main features of the new Hobart settlement are shown in Figure 6.5. They have been much changed by subsequent reclamation. The focal point was Hunter's Island, linked to the shore at the mouth of the Hobart Rivulet about 600 feet away by a broad spit exposed at low water. The creek debouched from a dense cover of tea-tree scrub and fallen timber, with swampy ground to the east and higher ground to the west. It was the latter, between the creek and the shoreline curving away south and west to Battery Point, on which the huts and tents of Collins' company were set up. The cove was delimited inland by "a yellow sandstone bluff, since cut away, and now forming the cliff overhanging

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12 Ibid., p. 79; also Historical Records of Australia, Series 3, Vol. 1, p. 223 (4)

13 Ibid.

14 Ibid. Collins apparently left the "Governor of Risdon Creek" (as the chaplain Knopwood called Bowen) and his settlement to its own devices, but after mutiny in April and a most unfortunate clash with aborigines in May the fate of the first colony was sealed. The whole establishment, less one free settler and 13 convicts, was shipped back to Port Jackson on 9 August, 1804 (Walker: op. cit., p. 56)

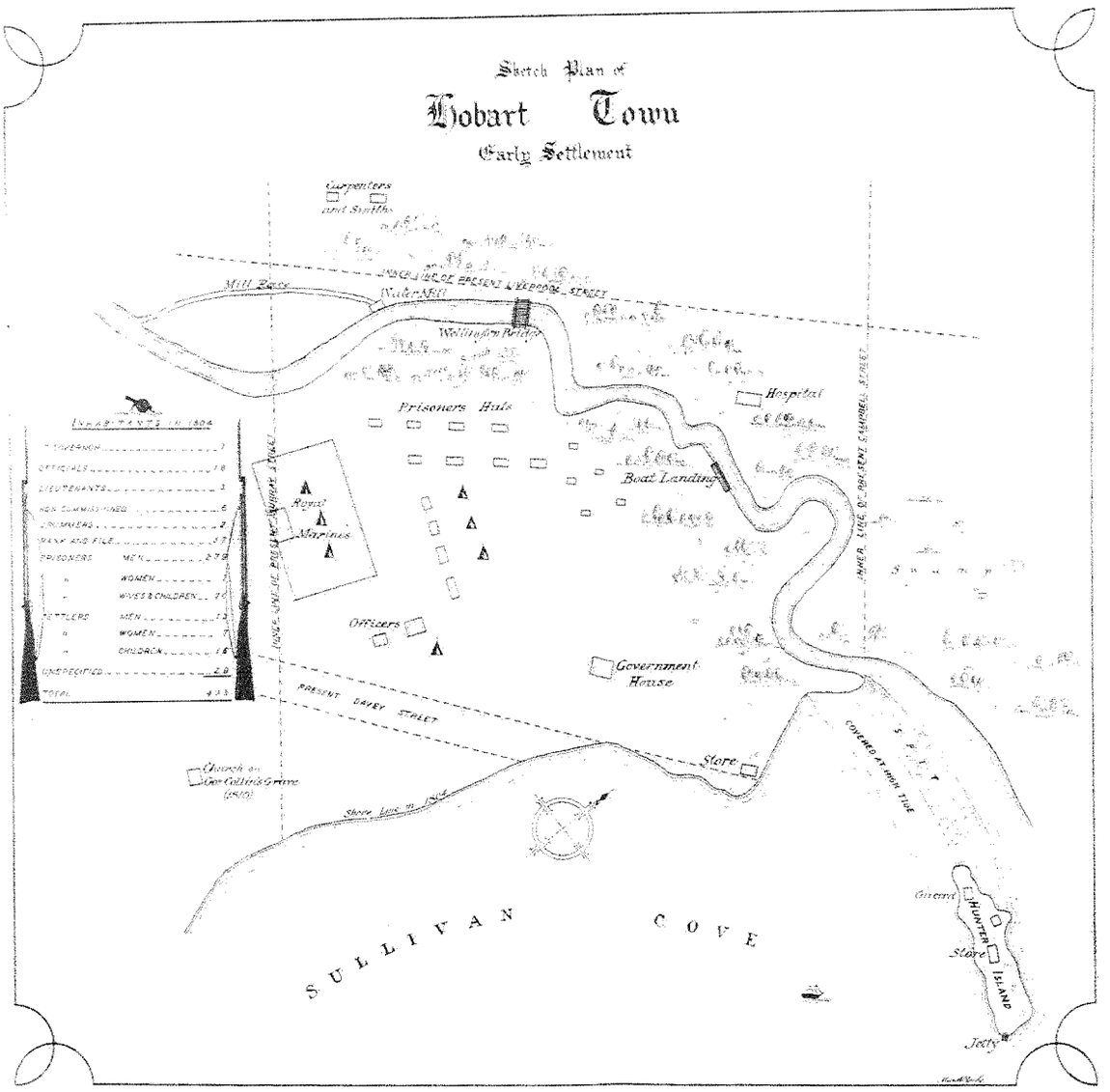

Fig. 6.5 Plan of the first settlement at Sullivan Cove, showing its relationship to the later street pattern (Tasmanian Club collection).

the creek at the back of the hospital,"[15] that is, behind the present hospital near the junction of Collins and Campbell Streets (Appendix XIV). Hunter's Island was used for the landing of stores, taken off the ships in boats. Although Collins arrived with a large sick list he reported to King that "I have been able, in the few days since I landed, to erect a temporary wharf at the Island, whereat boats may at any time of the tide deliver stores etc. and as I have pitched my store tents there, the unloading the transport will be very soon effected."[16]

The colonists at Sullivan Cove numbered 262, of whom 31 were settlers — 13 men, 5 women and 13 children.[17] After the first Sunday's church service they and their baggage were moved by the "Ocean" 's boats to a site near New Town Bay, where Risdon Road now links the Main Road to the Brooker Highway. Presumably because their number was few and the site was 4000 yards north of the Cove (half way to Risdon Cove) this area is rarely remembered when the development of the Hobart settlement is considered. It was in this vicinity, however, that agriculture was first promoted, soon after the completion of the first Government House on March 9, despite inferior axes and entirely manual labour. Ground beside Farm Bay (now Cornelian Bay cemetery) was prepared for wheat, after which the next of many initial tasks was replacement of the colonists' tents by whitewashed wattle-and-daub huts with flag-grass roofs. Walker considered that "the little camp on the hill above Sullivan's Cove must have been a grotesque and rough-looking village." In addition to the huts, most of the officers "still occupied tents, the hospital was a marquee, and the only piece of architecture making any pretence to be a civilised dwelling was the wooden cottage of the Governor."[18]

With labour in short supply wage rates were fixed for a number of tasks for those prisoners who found they had spare time after 5 1/2 working days beginning at 5 a.m. and ending at 6 p.m., except Saturday, 11 a.m. Prices for provisions were fixed in relation to labour, so that

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15 J.B. Walker: op. cit., p. 63

16 Collins to King, 29.2.1804, CO 201/35, p. 79

17 Ibid., p. 84

18 J.B. Walker: op. cit., p. 72

for 10 hours' work a labourer could earn 1 lb of pork and 1 1/2 lbs of flour, and a mechanic could procure 2 lbs beef and 2 lbs flour.[19] Fortunately the provisions were of good quality, but apart from the printing press most of the other stores made for a tale of woe. Collins reported to the Treasury on the inferiority of his goods:-

> "The Axes in general are so soft that the commonest wood will turn their edges.
> Of the Gimblets scarce one in a dozen will stand boring twice.
> The iron is mostly rolled, not wrought as it ought to have been.
> The materials for making and mending the convicts Cloathing are both very bad. The thread is nearly all rotten, and none of the Twist mentioned in the Invoice, appears to have been sent out."[20]

Winter took its toll, for in early August Collins reported that the consumption of medical stores "has been very great, having had no less than 467 people under medical treatment since we first landed at Pt. Phillip, most of whom have required a daily allowance of wine"; and he went on to say "I have mentioned a supply of blankets and rugs to be sent out, as the winter season in this Latitude has been severely felt by the people [and no wonder, in thatched huts!]. A mountain in my neighbourhood has been for some weeks covered with snow. Scurvy, diarrhoea and catarrh are the prevailing diseases...."[21] Considering the primitive conditions under which the colonists had existed, the deathroll from pre-embarkation at Spithead in March 1803 to July 31, 1804 at Hobart might have been worse. Nevertheless 36 people had died: 30 prisoners, one Royal Marine, one settler, one free woman, two free children and one free infant. Half, including 15 prisoners, died at Port Phillip, four at Risdon Cove, and five at Hobart.[22]

The arrival of the remainder of Collins' party from Port Phillip boosted the Hobart Town[23] population to 433;[24] stock from Risdon and

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19 Ibid.

20 Collins to Sullivan, 4.3. 1804, CO 201/35, p. 95

21 Collins to Hobart, 3.8.1804, CO 201/35, p. 155

22 CO 201/35, p. 171

23 Used from 15 June, 1804 when in orders sent to England Collins added 'Town' to the 'Hobart' appropriated from the Risdon settlement. A despatch of 24 April and an order-book entry of 5 May also use this form (HRA, 3, 1, p. 810). 'Town' was legislatively removed in 1881 (Walker: op. cit., p. 79)

24 CO 201/35, p. 157

Port Phillip brought the total of domestic animals in the colony to 178, of which 61 were sheep, by early August;[25] and cultivation on the Government Farm in July stood at 19 1/2 acres of wheat, 1 3/4 acre of oats and 2 1/4 of rye.[26] Perhaps a review of these developments with mid-winter behind him caused Collins to take a more sanguine view than a few days earlier in his report of illness, when on August 6 he wrote of the "most highly favourable" situation of the settlement and of its advantages over Port Phillip.

He further described the location chosen as " a port, the advantages of which when once known, will ensure its being the general rendezvous of all shipping bound into these Seas",[27] and, warming to the commercial theme, that the River Derwent was "most advantageously situated for the establishment and carrying on of a South Sea Whale Fishery."[28] As many as 50 or 60 whales at a time had been seen in the river from the camp site, and Collins' assessment was based on a detailed scheme for a whaling establishment drawn up on August 4 by his director of works and now Harbour Master, William Collins, and forwarded to the Colonial Office. However, the dependence of the colony on salt provisions was still a problem towards the end of 1804. Fish seem to have been caught from time to time and birds and poultry were occasional supplements (6), but it seems that kangaroo hunts were the most productive. Collins suggested that kangaroos taken into the public food store had saved the lives of many suffering from scurvy,[29] despite which the deaths were recorded in the three months August 9 - November 9, inclusive, of nine prisoners from scurvy, one from dropsy, and another from catarrh.[30] And on November 10 there were 36 sick people in the Hobart Town General Hospital -- 28 prisoners (21 with scurvy), five free people, and three marines.[31]

In the face of considerable obstacles Collins' achievement in

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25 J.B. Walker: op. cit., p. 85

26 CO 201/35, p. 151

27 Collins to Hobart, 6.8. 1804, CO 201/35, p. 176

28 Ibid., p. 178

29 Collins to Hobart, 10.11.1804, CO 201/35, p. 180

30 Ibid., p. 183

31 Ibid., p. 184

establishing the colony on any sort of viable basis was clearly praiseworthy. The rapid clearing and building and the almost daily writing of progress reports was nevertheless in some contrast with the speed of communications. Thus despite the prolific recording which has been extensively quoted above we find our responsible Governor writing in late February 1805 (one year after foundation) to Lord Hobart at the Colonial Office, in these terms:-

> "I am in daily expectation of receiving letters from your Lordship, containing I hope an approval of my having fixed the Establishment entrusted to my direction in this part of New Holland, instead of remaining at Port Phillip. I am persuaded, my Lord, that this, had it been earlier known, would have been found to be the most eligible spot for the Principal Settlement, and the language of such seafaring people as I have conversed with, is to the same effect."[32]

Toward the close of 1805 Collins was able to write with apparent confidence -- and he does not seem to have been a man falsely confident -- that

> "after a residence of nearly two years in this part of New Holland, I have every reason to be entirely satisfied with my situation, in every point in which it can be viewed, and I entertain very sanguine hopes, that in a short time the difficulties and deprivations generally attendant on young settlements will here have yielded to the ease and comforts of older establishments."[33]

Between August 1 and October 5 no less than 17,064 lbs of kangaroo had been received into the store and issued from it, as rations -- 11,193 lbs., to the hospital -- 5,146 lbs., and to the glue maker -- 725 lbs.[34] Doubtless this important inflow of fresh food, the warmth of the summer season, and the strengthening of the establishment to 484 persons (of whom 305 were prisoners)[35] put the Governor in an optimistic frame of mind, despite the deaths of five prisoners and two free persons in the six weeks November 9 - December 19. At this time he requisitioned for materials with which to construct a flour mill on the rivulet,[36] and it seemed that the future could be contemplated without undue apprehension,

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32 Collins to Hobart, 20.2.1805, CO 201/43, p. 11

33 Collins to Earl Camden, 17.12.1805, CO 201/43, p. 95

34 Ibid., p. 99

35 CO 201/43, p. 116

36 18.12.1805, CO 201/43, p. 101

and that the pioneer settlement was indeed 'over the hump'.

Fluctuating Fortunes 1806-1810

It must be remembered, however, that the colony was still substantially dependent upon external sources of supply, not only of manufactured materials and foodstuffs but of manpower. That it was too soon to regard the future as completely assured was made apparent by mid-1806. Writing of the poor state of provisions, Collins said "all my dependence now is upon a small quantity of wheat and barley which I grew the last season at Newtown, where I have established the Govt. Farm",[37] and, sensibly enough, he went on to request that consideration be given sending ships direct to Hobart Town instead of passing southeast Tasmania to Sydney and later coming south again to Hobart. Poor Collins' hope that his foundation would rival Sydney in a few years was "now thrown at a greater distance, and without our numbers are increased, and better food supplied to the inhabitants, can never be realized." Some settlers were too old, others too young for hard work, and all "have for upwards of 12 months been scantily and badly fed, and are now nearly entirely destitute of clothing."[38] With the need for self-sufficiency being thoroughly underlined 50 acres were tilled for wheat sowing and the colony prepared to tighten its belt until the position eased. Incredibly, at this time, nearly 2 1/2 years after the initial occupance of Sullivan Cove, Collins found it necessary to mention that he still lacked word from his sponsors (Castlereagh was now the official concerned) approving his choice of V.D.L. as an alternative site to Port Phillip.

Perhaps the most interesting development that next affected the settlement was the arrival of the evacuees of Norfolk Island: 34 on November 28, 1807 in the "Lady Nelson", 187 on January 17, 1808 in the "Porpoise", and 52 on March 2; altogether 273 new faces in Hobart Town. Seventy-two settlers' families, 27 non-holders of land and 11 prisoners

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37 17.6.1806, CO 201/43, pp. 124-5

38 Ibid., p. 126

made up the total, and all were billeted on the inhabitants until their own shelters could be built.[39] But the Norfolk Islanders were largely transferred to New Norfolk (initially Elizabeth Town) over 20 miles up the Derwent, their total number being doubled to 554 by further arrivals in June and October.[40] In May 1809 Collins informed Castlereagh that most were cultivating their land and erecting dwellings. Within the Sullivan Cove settlement progress seems to have marked time, though documentary evidence is limited. The problems of feeding and clothing his people were probably quite sufficient to keep the Governor fully occupied, without having to cope with disease and the uncertainties of shipping movements and official instructions. It is not therefore surprising that little attention was given the town plan and possible lines of expansion until the visit of the Governor-in-chief, Lachlan Macquarie, in 1811, more than a year after Collins' death in March, 1810 (7). Also, Collins suffered one other diverting problem in the last year of his administration.

In March 1809, one month after Hobart Town's fifth anniversary as a European settlement, the deposed Governor Bligh of New South Wales arrived at the Derwent. Whatever the justification for and legality of his enforced removal from office in Sydney, Bligh's arrival in Hobart Town instead of Britain made life difficult for Collins. He reported after two months that Bligh was meddling in local affairs by hearing settlers' complaints and by "ordering the boats of the colony when passing up or down the river in the day time on the public service, to come within hail of his ship, upon pain of being fired into if they did not comply."[41] Later Bligh "availed himself of his situation below the town, in Storm Bay Passage, and seized part of a supply of provisions which was coming here and sent by Lt. Governor Paterson for the use of his settlement."[42]

Shortly following a report by Collins' temporary successor as commandant, Lieut. Edward Lord, that "every mark of attention" had been

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39 20.4.1808, CO 201/52, pp. 3-4

40 CO 201/52, p. 22

41 Collins to Castlereagh, 31.5.1809, CO 201/52, pp. 32-3

42 Collins to Castlereagh, 20.7.1809, CO 201/52, p. 54

paid the late Governor's "regretted remains", to the extent that his funeral "was attended by upwards of 600 persons",[43] there appear in the primary record extensive "Remarks on the Country and Settlement formed in Van Dieman's [sic] Land." That part relating to Hobart is unsigned and undated, but another section and a later map of the Derwent[44] with remarks on the quality of the land carry the name of Lt. Oxley, R.N., responsible for extensive exploration in N.S.W., and an experienced observer. His comments are therefore a useful summary of the first phase of Hobart's development. They follow, in part:-

> "The houses of the inhabitants are indiscriminately scattered on both sides of a very fine stream of water, they are indeed of the very lowest class of cottages, and the officers are making some attempts to improve the appearance of the place by building a good brick store. And not before it was wanted as at present all the salt provisions for the use of the settlement are kept in the open air to the great detriment of the Crown which has thereby lost vast quantities of provisions, and to the serious inconvenience of those who are victualled from the Public Store."
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> "...New Town where the chief part of the settlers who came out with the Lt. Governor chose their Grants — these men having been so much longer on the spot have rendered their habitations comparatively comfortable — their white cottages in the midst of tolerable good gardens, afford a pleasing contrast to the wildness of the surrounding scenery — The ground here is fit either for tillage or grazing but the settlers have not made the most of their

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43 Lord to Rt. Hon. Wm. Windham, 3.4. 1810, CO 201/65, p. 1
A pathetic sequel to Collins' career of public service in N.S.W. and V.D.L. was correspondence with Lord Liverpool, beginning in May, 1811 with a letter from Maria Collins forwarded by Sir Rupert W. George of the Transport Office, concerning the inadequacy of her widow's pension. She was being paid the rate for a Captain's widow, £36 p.a., instead of the £100 accorded a Colonel's widow. The widow of Governor King, who died after leaving N.S.W., was receiving £200 p.a. (CO 201/65, pp. 157-164).

44 CO 201/65, p. 48

situation, few of them originally were farmers or understood anything of agriculture, they have in consequence so exhausted their ground by repeated crops of the same grain that it now produces little or nothing."[45]

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45 CO 201/65, p. 10

References Chapter 6

(1) J.B. Walker: Early Tasmania Papers read before the Royal Society of Tasmania during the years 1888 to 1899, Hobart, 1950 (3rd imp.).

(2) M. Flinders: Observations on the Coasts of V.D.L., on Bass's Strait and its Islands, and on Parts of the Coasts of N.S.W.; intended to accompany the charts of the late discoveries in those countries, London, 1801.

(3) Colonial Office file: CO 201/35, Hobart Town 1802-04; CO 201/43, Hobart Town 1805-06; CO 201/52, Hobart Town 1807-09; CO 201/65, Hobart Town 1810-12, Public Record Office, London.

(4) Historical Records of Australia, Series 3, Vol. 1

(5) M. Chisholm: Rural Settlement and Land Use. An essay in location, London, 1962.

(6) J.F. Howeler-Coy: An account of food and drink in Tasmania 1800-1900, Papers and Proceedings, Royal Society of Tasmania, 100, 1966, 81-88.

(7) J. West: The History of Tasmania, Launceston, 1852, Vol. 1.

Chapter 7

Growth and Differentiation

The day after his arrival at Hobart Town on November 23, 1811 (after a stormy voyage of 18 days from Port Jackson) Governor Macquarie "took a walk through the town with the view to lay down and frame a regular plan of it, none having ever been yet laid down for it."[1] After a busy round of engagements and inspections, including the ascent, naming, and selection of Mt. Nelson as a signal station, Macquarie issued General Orders on December 1 "respecting the dividing of Hobart Town into one principal square and seven streets, to which is to be in future rigidly adhered to in carrying on and constructing the buildings in it."[2] Surveyor Meehan had drawn up Macquarie's plan, which appears as Figure 7.1.

Several features of this first plan deserve notice. Firstly, it set the spatial pattern of future development. Even the angled relationship of Harrington and Murray, Elizabeth and Argyle Streets (compared with the near-parallelism of Elizabeth and Murray) remain, though the departure from a regular grid was made so as "not to interfere with many Houses which are now erected and which, if disposed of in a regular plan, must be entirely destroyed."[3] Secondly, seven of the nine place names chosen by Macquarie persist. Pitt Street became Davey, and his George's Square was occupied by Government House for over four decades, so that when it became an open space it was named Franklin Square after a later and perhaps more widely known Governor than himself. Both Pitt and George are perpetuated in central Sydney, however, so that Macquarie's nomenclature has not fared badly overall, with Elizabeth Street after his adored wife, Argyle after his home county, Collins after the founder, Murray after the Commandant, and Liverpool after the Minister, apart from

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1 Journal to and from Van Diemen's Land to Sydney in N.S.Wales, Lachlan Macquarie, Governor of New South Wales. Journals of his tours....p. 57 (1)

2 Ibid., p. 61

3 Remarks, on the plan.

Fig. 7.1 First street plan of Hobart, executed by order of Governor Macquarie 1811. Except for Pitt Street becoming Davey Street and George's Square becoming Franklin Square, the nomenclature and alignments persist. Note the provision for spacing the houses back from the street. (Hobart No. 131, Lands & Surveys Dept.)

the street carrying his own name. It is clear that Macquarie intended George's Square to be the focal area, since the church, court house and main guard house were projected to look onto it, and the houses of Lieuts. Gunning and Campbell were not to stand in the way of its formation, even though street directions were varied because of other existing houses. The 60 feet allowed for streets and bordering footpaths was a generous provision for the time, particularly when taken in conjunction with a further 20 feet allowed on each side "as an area or inclosure in front of the Houses".[4] Macquarie appreciated regularity and was concerned that the houses should attain more of it than hitherto.[5] The irregularity of the few streets in existence in 1811 can be seen from the plan, as also the location of a few (perhaps the few) buildings of any public consequence.

Delayed by bad weather from his scheduled departure overland for Port Dalrymple,[6] Macquarie indicated on the morning of December 2 "where the new Military Barracks and Hospital are to be built on Barrack Hill, a little south east of the town, also where the new Genl. Hospital and County Jail are to be built on an eminence to the westward of the town and near the west bank of the river."[7] These, despite some directional confusion, were presumably the Davey Street hill on which the Barracks came to be erected, and the site overlooking the rivulet and bounded by Liverpool, Campbell and Argyle. Macquarie left the colony in no doubt, however, concerning his street plan, for he had "the names of the great square and principal streets painted on boards....erected on posts at the angles of the square and streets to define and mark out their respective limits and direction; naming them as follows: vizt. George's Square, 1 Macquarie (main Street), Liverpool Street, Argyle Street, Elizabeth Street, Murray

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4 Ibid.

5 J. West: The History of Tasmania, Vol. 1, p. 50

6 During which journey the good Governor exhibited certain megalomaniac tendencies in naming or re-naming Macquarie Springs, Mt Henrietta (after Mrs. M.), Macquarie River, Elizabeth River (after Mrs. M.), Macquarie Plains and Henrietta Plains.

7 Journal to and from Van Diemen's Land, op. cit., pp. 61-2

Street, Harrington Street, and Collins Street; being 3 long and 4 cross streets as per plan of the town."[8]

The adaptation of Macquarie's street alignments to existing buildings could not be complete, and there is evidence of the process of transfer and compensation which accompanied the removal of buildings obstructing the implementation of the plan. Most of the properties listed in a "Return of the Purchases and Exchanges that have been made by Government of Buildings and Lands in Van Diemen's Land" (3) were in this category. The complete list appears as Appendix XV.

Twenty-one house-, skilling-, and hut-owners were given other building plots and twenty were paid a total of £245-13-3, varying from £4 to James Clego for his "hutt" in Georges Square to £24-15-0 to Wm. Presnell for his house in Collins Street. A note beside several properties listed under 1818 and 1819 dates says that "all these were valued in 1813 but the Houses were not paid for and removed till 1818." A George Guest was paid £200 for one house and two huts "in part for the loss of those buildings chiefly destroyed by the military who occupied same as barracks," but which in any case would have had to be valued and compensated since they stood in the way of new streets.

Other resumptions for town improvements not immediately connected with Macquarie's plan included £169 paid three householders "near the church" to allow space around the church or "for a Parsonage House to be built"; £40 paid Andrew McGill in Macquarie Street so that two adjoining property-owners might have room to build two-storey houses, with Government approval; and £30 to John Gwynn for purchase of his skilling "near the water", "in order to keep the Government land near the creek clear" (the price was for the house at £24, and 6000 bricks). At New Town £1,000 was paid Andrew Whitehead for a house, outhouses and 105 acres of land "required to complete the track fenced in by Government from Hobart Town to New Town Rivulet." In addition to that sum Whitehead was given 600 acres of land representing a further £300.

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8 Ibid., p. 62

This equivalence of ten shillings per acre for land within the urban sphere of influence is of the same order as later valuations by the Land Commissioners.

It is unfortunate that Macquarie's return visit toward the end of his governorship in 1821 did not provide a detailed critical appraisal of his town plan's development, though by the 1820s other sources of comment were becoming available. Lieut. Jeffreys' work (4), the first devoted wholly to V.D.L.,[9] described Hobart Town as "near one mile in length, from north to south, and about half a mile in breadth, containing 300 houses, occupied by a population of from 1100 to 1200 persons."[10] Several mills had already been erected on the rivulet, and the barracks stood on their hill south of the town. The houses, according to Jeffreys, were widely spaced, those of the lesser streets generally consisting of ground floor only, each with a garden. The earliest available illustration of the town after the foundation year is that by Jeffreys (Figure 7.2) which does little to substantiate his verbal commentary, beyond showing a very loose-knit centre of settlement. Evans (5), who was Surveyor General of V.D.L. noted that Macquarie recorded during his 1821 visit the great improvement in housing since his previous stay in the colony: "The wretched huts and cottages of which it then consisted were now converted into regular, substantial buildings, and the whole laid out in regular streets, several of the houses being two stories high, spacious, and not deficient in architectural taste." There were, he reported, 421 houses at the time of the Governor's visit, and the population was upwards of 2700.[11]

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9 And thought to have been partly taken from G.W. Evans' book in preparation: see Evans' preface; C. Craig's introduction to the facsimile reproduction of The Hobart Town Gazette, Vols. 1 and 2, Hobart, 1965, pp. vi-viii; and K. von Stieglitz's Introductory Note to the 1967 facsimile edition of Evans.

10 C. Jeffreys: Van Dieman's Land, p. 50

11 G.W. Evans: A Geographical, Historical and Topographical Description of VDL, pp. 61-2. This seems a reasonable number of houses on the basis of average occupancy levels, but it is recorded elsewhere (HRA, 3, 4, p. 637) that the town contained 594 houses in October 1820 - 9 stone, 245 brick and 340 wood. Launceston possessed 127 houses at that time.

HOBART TOWN IN 1817.

NOTES by LIEUT. JEFFREYS, R.N., Commander H.M.S. Kangaroo.

The Southern District of Van Diemen's Land is the most important county on account of its containing the chief town, called Hobart Town, situated on the Western shore of the River Derwent, about 13 miles from its Northern entrance. The town is pleasantly situated in a gently sloping plain, at the foot of Table Mountain alias Mount Wellington. It is nearly one mile in length, from North to South, and about half a mile in breadth, containing three hundred houses, occupied by a population of from eleven to twelve hundred persons. A beautiful stream of fresh water runs through the centre, with a cottage sufficiently strong to turn any number of mills, several being already erected. Such is the abundant flow, that were the population twenty times its present magnitude, the inhabitants would find from this rivulet an ample supply for all the purposes of comfort and convenience. The streets branch off at right angles, but the houses are not built at somewhat distance from each other. They are, however, constructed uniformly. Those in the main street consisting with only one exception of a ground, one storey and an attic. The houses of the lesser streets generally consist of the ground floor only, with a garden to each house. Government House occupies the centre of the main street, and is, if not superb, a very comfortable dwelling. Mr. Birch's house—the largest one alluded to above—stands near the south end of the main street, and is a considerable pile of building, having three storeys, with an embattled parapet. A moderately-

Mr. Birch. Church. Gov.t House. Fort. Gov.t Store.

KANGAROO GOVT SCHOONER. Drawn by Lieut. CHS. JEFFREYS. R.N.

HOBART TOWN IN 1817.

sized square has been marked out, in the centre of the High Street. On one side stands the Governor's House; on another, a small, but neat church; and on the third, a strong and commodious gaol. The fourth side is intended to be occupied by a Hall of Justice, but at present there is only a cottage on that part, the residence of E. Abbott, Esq., Deputy Judge Advocate. The Military Barracks are erected on a rising ground, about three-quarters of a mile to the southward of the centre of High-street, comprising two sides of a square, one of which is occupied by the officers, the other by the sergeants, corporals, and privates. They are sufficiently large for the reception of from two to three companies of infantry. At the north end or bottom of the town, and near the general landing-place, is a large brick store, belonging to Government, in charge of the senior officer of the Commissariat, who, of late years has been a D.A.C.G. [illegible] clerks and storekeepers under him. Hobart Town stands on a good soil, so that the gardens yield abundance of vegetables for the table, particularly those attached to Government House, and the residences of the Rev. Mr. Knopwood, Mr. Evans, Mr. Birch, and a few others, which are well laid out and regularly attended to. The vegetables grown in them are remarkably fine, comprising all those reared in English kitchen gardens. Fruit plants produce in abundance, and of the finest kinds, consisting of apples, pears, plums, mulberries, raspberries, strawberries, gooseberries, currants, &c. Fish and oysters are brought to the town in considerable quantity, but the high price of labour at present makes them dear. Brick-clay and freestone for building are found within the short distance of a mile from the town, and on the opposite side of the river there is limestone in abundance. Hobart Town is under the administration of a Lieutenant-Governor, who commands the Island; a Deputy Judge Advocate and three Magistrates, with the usual police officer's constables? and the D.J. Advocate's power is extremely limited, having only authority to try civil causes not exceeding fifty pounds.

Fig. 7.2 Lieut. Jeffreys' sketch of Hobart Town from the Cove, 1817. (Tasmanian Museum collection)

The main public buildings were Government House, the church (St. David's), the military and prison barracks, the gaol, and a "well-constructed" hospital. Four water-mills were grinding corn, the Mulgrave Battery occupied the Point at the port entrance, and the Mt. Nelson signal post was in operation. Evans' views of the settlement from the Domain vicinity show most of these features, giving the impression of a very neat township (Figure 7.3). Edward Curr, manager of the V.D.L. Company's property, had little to add to Evans' account of Hobart. He did, however, report a daily increase in new buildings, with houses already numbering 600 and inhabitants 3,500,[12] and two-storey houses on the increase. Launceston, he wrote, was "far inferior to Hobart Town in its buildings, public and private"; that town had 250 dwellings "the generality of which may more properly be called hovels."[13]

The Land Commissioners' Survey of 1826.

At the same date as Curr's account Wentworth (7) provides relevant statistics, some of which derive from Evans, but more direct bearing on Hobart's development is found in the 1826 plan and report of the Land Commissioners on public buildings in Hobart (8). Their town plan with actual and proposed buildings is shown as Figure 7.4.[14] Its importance was hardly less than that of Macquarie's initial blueprint, for they were reporting on "the most eligable situations for the various Public Buildings and Establishments which are required in Hobart Town, considering it as the Seat of Government and Capital of the Island and its Dependencies; and also to point out the reservations which in our Opinion it would be advisable to make, for the various Establishments and Departments of Government, and generally, for all Public purposes; either for the Health, Convenience, or Gratification of the Inhabitants."[15]

12 E. Curr: An Account of the Colony of VDL, p. 5 (6)

13 Ibid., p. 42

14 The area east of Collins Street, including Macquarie and Battery Points and Sullivan Cove appeared as a separate section of the plan, and is reproduced at larger scale beside the main plan between pages 100 and 101 in Journals of the Land Commissioners for VDL 1826-1828, and also in C. Craig: Early town planning in Hobart, P. & P. Roy. Socy. Tas., 1944, p. 108 f. (9). It shows little save the Hunter Island warehouses, Knopwood's house, and a section of the road to Sandy Bay cutting the western boundary of William Sorell's 90 acres and the Sandy Bay (Wellington) Rivulet near their junction.

15 Journals of the Land Commissioners, p. 101; primary source: file CSO 1/107/2597/2, State Archives, Hobart.

Fig. 7.3 Evans' 1820 view of Hobart Town from the Domain. The frontispiece to his Description of V.D.L. shows slightly increased settlement in the foreground. (Dr. C. Craig's collection)

1. Military Barracks
2. Gaol
3. St. David's Church
4. Government House
5. Commissariat Stores
6. Mulgrave Battery
7. Mt. Nelson signal station

Accordingly, they had made "a careful and minute Survey of the site of the Town and its Environs" and deliberately considered "the means and plan, by which the objects desirable....may....be the most advantageously and economically attained, either at present or at future times."[16]

Their considerations were under three main heads: church and school establishments; reservations of ground connected with the health, convenience or recreation of the community generally; and the government, civil and military. It will be seen that not all the Commissioners' provisions have come about, perhaps the main reason being that despite their diligence the gentlemen concerned failed to appreciate fully the implications of relief. The grid of Macquarie's founding was projected in regular fashion toward, and presumably beyond, the limits of urban occupance as they then were. The Govern-- ment Domain clearly formed an inviolate barrier to northeastern extension; in the west, the hilly area of West Hobart (as it became) was allowed to confine the plan to the Patrick-Molle intersection, though Brisbane Street was continued straight through Antill up a slope rising approximately 20 feet in every 100. In the southwest, Davey Street (mis-named, repetitiously, Collins) was directed head on to the 200-foot contour and the rising slope behind it. Least practicable of all, Antill Street was shown to run from 165 feet at Davey Street down to about 105 feet in the bed of the rivulet less than 900 feet distant, then bravely ascended to the 260-foot contour at Goulburn Street in the space of 500 feet horizontally.

Recognising the incipient insufficiency of St. David's Church for a growing population, the Commissioners recommended two reservations for others -- one (Church C) very near the site adopted by Trinity Church, and the other (Church B) near the point where Macquarie and Davey Streets branch to follow the valley and the ridge

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16 Ibid.

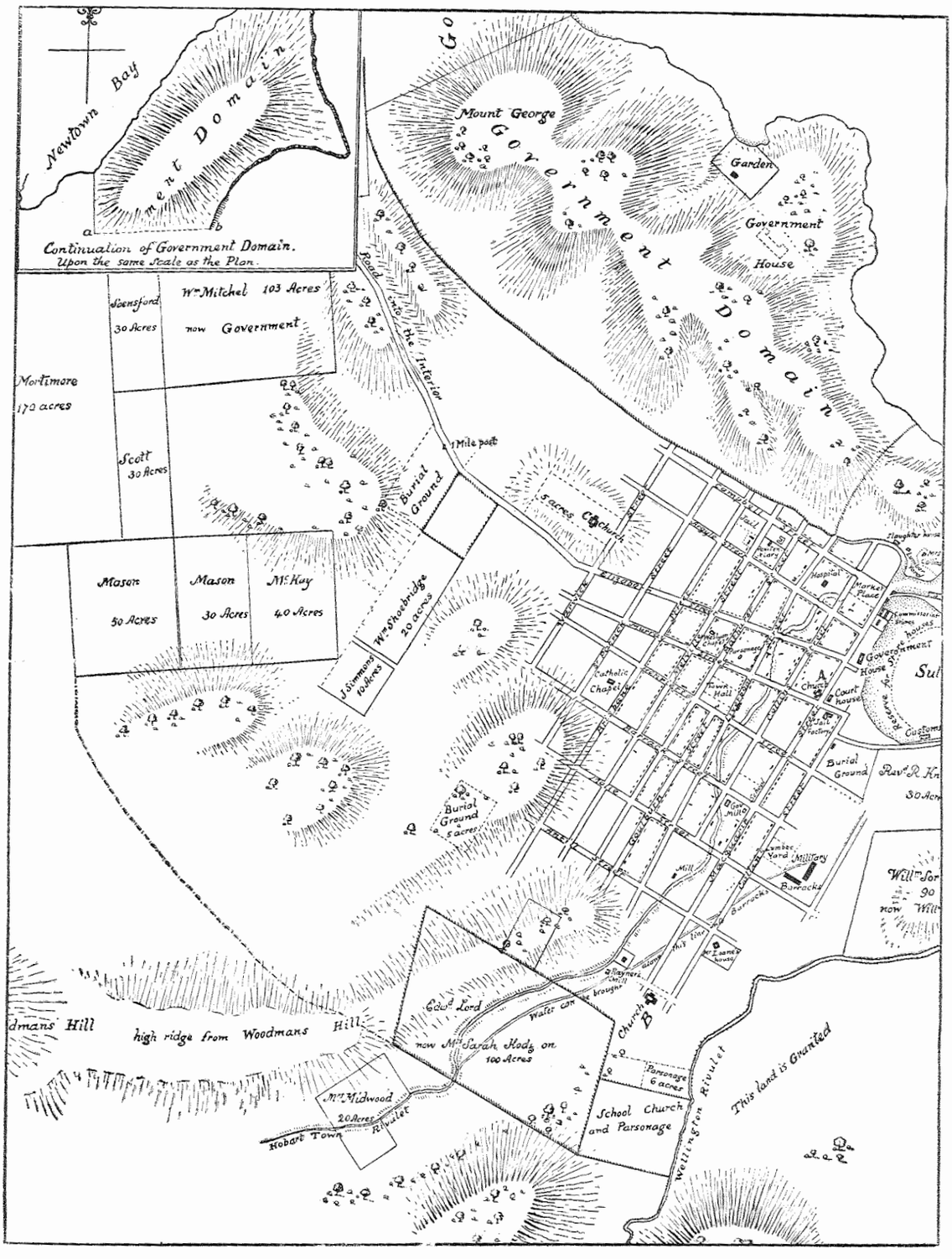

Fig. 7.4 Land Commissioners' plan of Hobart and surroundings, 1826 (after Craig, ref. (9)).

respectively. The "most-Convenient" location of these two points "for the attendance of the Inhabitants at Divine Service"[17] was unexplained. A school reserve was designated across Barrack Street from the Government mill, between Collins and Macquarie, a site later occupied by the Hutchins School; and mindful of the need for teaching "the rudiments of Agriculture" a reserve of 30 acres was recommended near Church B, where an out-of-town school could undertake the task. Parsonages were provided for in association with each new church, while the 1 1/5 acres already vested in the Chaplain between Liverpool and Bathurst, Murray and Elizabeth "being in the Middle of the Town is all that can be obtained." The Burial Ground containing the remains of the first Governor "being in the Centre of the Town" was recommended for closure forthwith, to be replaced by 10 acres behind the one-mile post on the road to the interior, and 5 acres west of the town on steeply sloping land above what is now Knocklofty Terrace.

Under their head of matters affecting the community generally the Commissioners first considered "the future extension of the existing town", recommending that all the ungranted land on the plan as far as the (obviously arbitrary) dashed line on the south west be "only given in Allotments for Houses and Gardens."[18] In considering "public improvements, walks, and drives" it was observed that the part of the town near the female factory (lower Murray Street) was susceptible of great improvement, and that the construction of a road leading eastward to the south side of Sullivan Cove would make available a considerable space in "the best and most valuable part of the Town" before the value of the property increased. Two other constructive proposals in this category were the building of a bridge across the rivulet at the north-eastern end of Macquarie Street to connect it with Macquarie Point and the Domain, and the

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17 Ibid., p. 103

18 Ibid.

reservation of 20 feet on either side of the rivulet with "no building whatever [be] permitted within that space" in the interests of "pure Water for the Health of the Inhabitants."[19]

The Commissioners' modernity was firmly established by their awareness of public bathing requirements, even though they failed to move in the matter: "Although we cannot omit taking notice of so desirable an Establishment as public Baths, Yet it is impossible to fix on any particular place for them as this must be determined by Circumstances which it is impossible to forsee — But to the South East of the Town beyond Wellington Rivulet there is a small Sandy Bay the Beach of which should certainly be reserved for Bathing Machines and Bathing Houses."[20] They recommend further that the flat land beyond Wellington Rivulet and behind the beach should be purchased from the individuals to whom it had been granted for use as a place of public amusement and recreation. In more business-like vein the "whole distance from Mulgrave Battery round Sullivan's Cove to Macquarie Point" was reserved for mercantile and Government stores or batteries, allowing for the introduction of quays and landing-places when and where needed.

It was thought that the best site for a market place was that already reserved between the jetty, Macquarie and Campbell Streets, but that another market place with a Town Hall might become requisite, so that land between Liverpool and Bathurst Streets should be appropriated (Figure 7.4). Some thought was given the lower course of the Hobart Rivulet in relation to the main market; the mouth should remain open so that "Boats from the Shipping in the Harbour may come into the Market for the supplies which they require."[21] At the same time the Commissioners were aware of the "sudden accessions of water to which the stream is liable, from the Mountain Torrents which come down after heavy rains," and for that reason

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19 Ibid., p. 104

20 Ibid.

21 Ibid., p. 105

were opposed to turning the whole of the waters into the new aqueduct, which led to the Barracks. They believed that the marketplace could be secured from flooding by building up the banks of the stream (throwing wooden bridges across here and there), and, if necessary, covering over the upper part of the course entirely.

Civic and Military Governmental Functions

In their third major category of proposals the Commissioners dealt with 15 types of Government facility. They heartily approved Macquarie's Domain site for the Governor's residence: "An agreeable degree of retirement, with immediate vicinity of the Scene of Bustle and Business, both Public and Private, is most admirably and conveniently combined, and even the exact spot seems to be pointed out where a House should be erected by its having .... one of the finest Quarries of Stone which has yet been discovered in the Island."[22] The Court House was already satisfactorily located; the then Government House had been reported "in an unsafe and dilapidated state" and was "obviously most incommodious and unfit" for the Governor's continued residence, but the Commissioners considered the site unsurpassable for Government offices and therefore that on the transfer of the Governor to a new House on the Domain the old building "might with great economy be appropriated to that purpose." The surrounding area was recommended for governmental offices, the Chief Justice's residence, and public purposes generally. The site designated for the Custom House allowed for "sufficient depth of water....for large Vessels to come close to the Shore," and the hospital was already well placed on a site at once "central and airy, commanding a fine prospect over the Harbour and Estuary" and with space in the allotment for expansion.[23]

The reasoning behind the Commissioners' proposal that the Lumber Yard and Dock Yard should be "on the South side of Macquarie

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22 Ibid., pp. 105-6

23 Ibid., p. 106

Point on the small Inlet forming the Mouth of the Town Rivulet" was good. Location on a muddy creek and back of the "Jetty Line of Merchant Stores" rendered the site unsuited to other kinds of activity; the only shipbuilding near the town had been attempted on the creek, thereby exemplifying its suitability for dockyard adaptation; and proximity to the Barracks for Male Prisoners (Penitentiary on Figure 7.4) made it particularly appropriate as the place to land "timber and other bulky and weighty articles on which they have to perform their work." Furthermore, with a fine sense of discrimination between the rough and the noxious, the Commissioners recommended the removal of the slaughterhouse (currently occupying part of the site) eastward of Mrs. Collins' allotment where it would be close to the water's edge and "shut out from view by the perpendicular Banks immediately behind."[24]

The gaol in Murray Street opposite the Court House had been reported insecure and unfitted to its purposes by the Board of Survey on Public Buildings; accordingly, the Commissioners proposed construction of a new stone Jail near the male prisoners' Penitentiary (convict barracks) between Bathurst and Melville Streets.[25] Again, the reasoning is of interest. The site drained down a steep bank to a small creek; there was ample space for building; the best stone quarry was nearby; and the location "would not spoil the best and most valuable part of the Town, which it would do if built adjoining the Court House."[26] It was also pointed out that two springs of water

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24 Ibid., pp. 106-7

25 This site, between Melville & Brisbane Streets, is shown on the plan (Figure 7.4). There are, however, two quite different sets of recommendations concerning the gaol and the Penitentiary for Male Prisoners. That of Craig (9), who provided the plans reproduced (at smaller scale than in his own paper) in the Journals (8), fits the plan and is used here. The alternative recommendation (Journals, p. 107) suggests building the new gaol on "the Vacant Plot of Ground between the Military Barrack Square and the present Burial Ground adjoining Davey Street."

26 This last argument is particularly interesting, for it is consistent with the Commissioners' earlier observation concerning the valuable area near the female Penitentiary (factory), and possibly inconsistent with the alternative (Davey St.) site. However, in connection with the drainage factor, both sites are described as "elevated and airy", and while this reasonably fits the site below the Barracks, at about 100 feet, it is less than adequate for the 50-60 foot elevation of the Campbell Street location.

"from the Hills to the North-West and Westward" might be led through the gaol yard. The latter was used by the inhabitants for all purposes, though local well-water was best.[27]

The site of the Barracks selected by Macquarie met with approval, and the Lumber Yard adjacent was recommended for incorporation to give 19 acres of Barrack Square for musters and parades. Macquarie Point was suggested as an area where military exercises might be conducted, having "sufficient space to manoeuvre as considerable a Body of Troops as will probably be ever Stationed in Hobart Town." It was thought that the whole military requirement would be met by reservation of Barrack Hill and Macquarie Point; together with Woodman's Hill (Knocklofty) and the ridge running from it (Forest Road), which overlooked the Barracks; Mount George (the northwestern peak of the Domain); and the six-acre site of Mulgrave Battery.

The adoption of many of the Commissioners' recommendations and the persistence of prior features to which they gave approval, as well as the fundamental influence of Macquarie's street pattern, underlines the great importance of pre- and early urban factors in shaping the physical course of later urbanisation. The process

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27 Craig, op. cit., p. 107. The same argument exactly is used in reference to the Penitentiary for Male Prisoners in the Journals account (also p. 107). This is not inconsistent, as the penitentiary adjoined the proposed gaol site (Craig), though the same springs could not of course have served the Davey Street site (Journals). Clearly, the Commissioners must have revised their thinking, at one stage wanting to leave room for expanding the Penitentiary across Melville Street while moving the gaol to the Barracks vicinity, at another proposing the gaol transfer to the Penitentiary vicinity. This latter seems likely to be the revised version, since the Town value reasoning is introduced in substantiation and the choice elaborated as follows (Craig, p. 107): "The disadvantage of criminals not being so near the scene of their Trial [away from the Court House] will be at least counterbalanced by the benefit of Evil disposed Persons having all excuse taken away for loitering in the Vicinity of the Jail, which they now have from its proximity to the Court House, and of which there is too much reason to suppose they avail themselves to contrive and prepare false evidence."

has been well illustrated elsewhere, particularly as concerns the effects of pre-building land ownership and subdivision (10, 11, 12), and it will be taken up again in this enquiry.

Land Valuations Around Hobart

Through their valuations the Land Commissioners imposed one other potential influence upon the course of Hobart's development; potential in that the differential effects of their work cannot readily be assessed.[28] The values widely allocated to rural land by the Commissioners varied from two shillings and sixpence to six and seven shillings per acre, but they also allotted values to land around, and to a small extent within, Hobart. Thus on October 19, 1826 they walked over the piece of Crown Land at the rear of Mulgrave Battery, and valued "the Front opposite to Sullivan's Cove" at £60 per acre and the back at £30 per acre.[29] They then rode out to view the parish of Sandy Bay where "numerous small Grants" were "miserably cultivated," but owing to the area's proximity to Hobart the land was valued at five shillings per acre. The differential between the urban and pre-urban localities is notable. In relation to this range, the values affixed the unappropriated peri-urban land beyond Warwick Street on the northwest and Molle Street on the southwest "previous to its being exposed to sale" are of considerable interest. They varied only from £3 to £4 per acre, in six groups of blocks labelled A to F (Figure 7.5). The areas of higher value in the Mt. Stuart-New Town vicinity (A) and the section of South Hobart - Sandy Bay between the two rivulets (F) certainly became more residentially desirable than the northern

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28 There may not have been any effect at all, as their report, first made in March 1829, was (through a history of procrastination outlined in Eldershaw's introduction to the Journals, pp. xiv-xvii) published only in January 1836. In any event the valuation of the Hobart Town vicinity as shown in Figure 7.5 is not described in the published Journals, nor is the existence of the map indicated.

29 Journals of the Land Commissioners, p. 30

Fig. 7.5: Valuation of land adjoining the built-up area of Hobart Town, c. 1826 (Hobart No. 7, Lands & Surveys Dept.).

area east of Elizabeth Street (C) and the steep western margin of occupable land (E). The one block in category B was in the steep and fairly distant northwest, while higher-value D in the North and West Hobart area adjoined the developed street pattern and was obviously ripe for appropriation despite the stiff uphill pull to many of the sites.[30]

Urban Growth from the 1820s

Curr and others made it clear that Hobart Town had left behind the camp days and had embarked by the early 'twenties upon a period of true urban growth. The conversion was probably best captured by Charles Rowcroft (13) who found at the outset of the 'twenties that the sleepy town had "a straggling, irregular appearance; a pretty good house here and there, and the intervening spaces either unbuilt on or occupied by mean little dwellings, little better than rude huts."[31] At the close of autumn 1821 he "could not help being struck with the rapidity with which the town was increasing....and the colony was thriving and improving rapidly."[32] As he "rose the little hill going out of the town" and looked back, " it looked so like the beginning of a town....all interspersed with the poles and the scaffolding of houses being built, and it looked almost as if a lot of people had come only the night before and had begun to set up a city to dwell in."[33] Lloyd (14) assists in pinpointing the beginning

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30 The areas valued are tabled (from Figure 7.5) as follows:

A : ≅4, 93 ac. 2r. 2p.	D : ≅4, 100-0-38
B : ≅3, 44-0-36	E : ≅3, 187-1-5
C : ≅3, 126-0-37	F : ≅4, 48-1-36

To this 599-3-14 was added 67-1-30 in "the various allotments of ground detached from the Town containing more than the ordinary proportion of land given for the purpose of building but under 30 acres" and 463-1-14 contained "within those parts already marked out for streets and upon which buildings have been commenced, including the Barrack Square, Churchyard and all government reservations for future churches, market places etc." : total 1,130 acres 2 roods 18 perches.

31 [Charles Rowcroft]: Tales of the Colonies, Vol. 1, p. 16.

32 Ibid., p. 175

33 Ibid., pp. 25-26

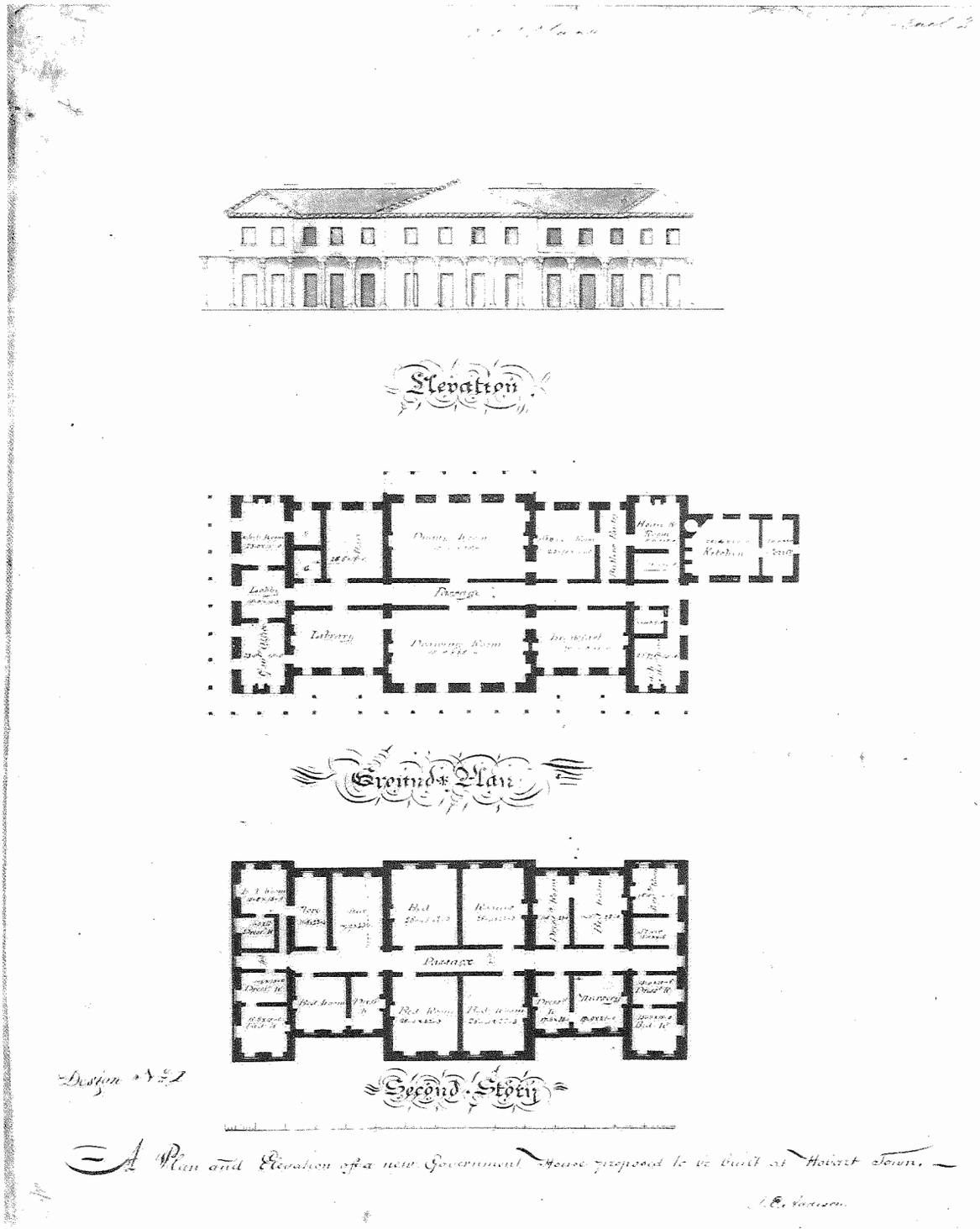

Fig. 7.6 One of the designs for a new Government House, 1828 (MPD 116/4, Public Record Office).

of urbanism at about 1821. On arrival in April 1820 he found that "the town wore an exceedingly primitive appearance; there being in reality but fifteen or twenty buildings in it worthy the designation of dwelling-houses. The remainder, in number about 250, could only be classed as huts, being constructed of various materials, such as split palings, wickerwork bedaubed with clay, and log and turf cabins of all orders of low architecture."[34] To what extent the official activities of the Land Commissioners represented the local ethos, or influenced it, is not certain, but there are many indications that building and planning were in vogue. At the base of the surge lay a population increase from about 2500 to 6000 during the decade. Apart from developments in the port area, which will be dealt with in Chapter 8, the introduction of architectural design and planning in the hands of John Lee Archer and others must have constituted an uplifting force after the rude cultural additions associated with the first 15 years' occupation of a naturally lovely locality. In response to the parlous state of Government House reported by Evans in 1824 and its effective condemnation by the Colonial Architect in the following year (15), designs were prepared for a new building on the Domain site. One of them in pleasing colonial style is shown as Figure 7.6, while Lee Archer's grander design, dated 1827, appears as Appendix XVI. The Chaplain was also to be re-housed and Lee Archer's plan (Figure 7.7) shows the cost of the building as an estimated £500. The figure is of some interest, since the house is of the size which in the 1847 valuation would have been assessed at no more than £20. Even granting an abnormally high construction cost for an officially designed and supervised building, an annual to capital value ratio approaching 1 in 20 is suggested.

Important as the commissioning and preparation of designs must have been (even though all projects were not immediately implemented, notably the replacement of Government House), it would be wrong to suggest that advances in community aesthetics (largely, the settlement image or townscape) did not show before the latter 1820s. In

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34 G.T. Lloyd: Thirty three years in Tasmania and Victoria, p. 8

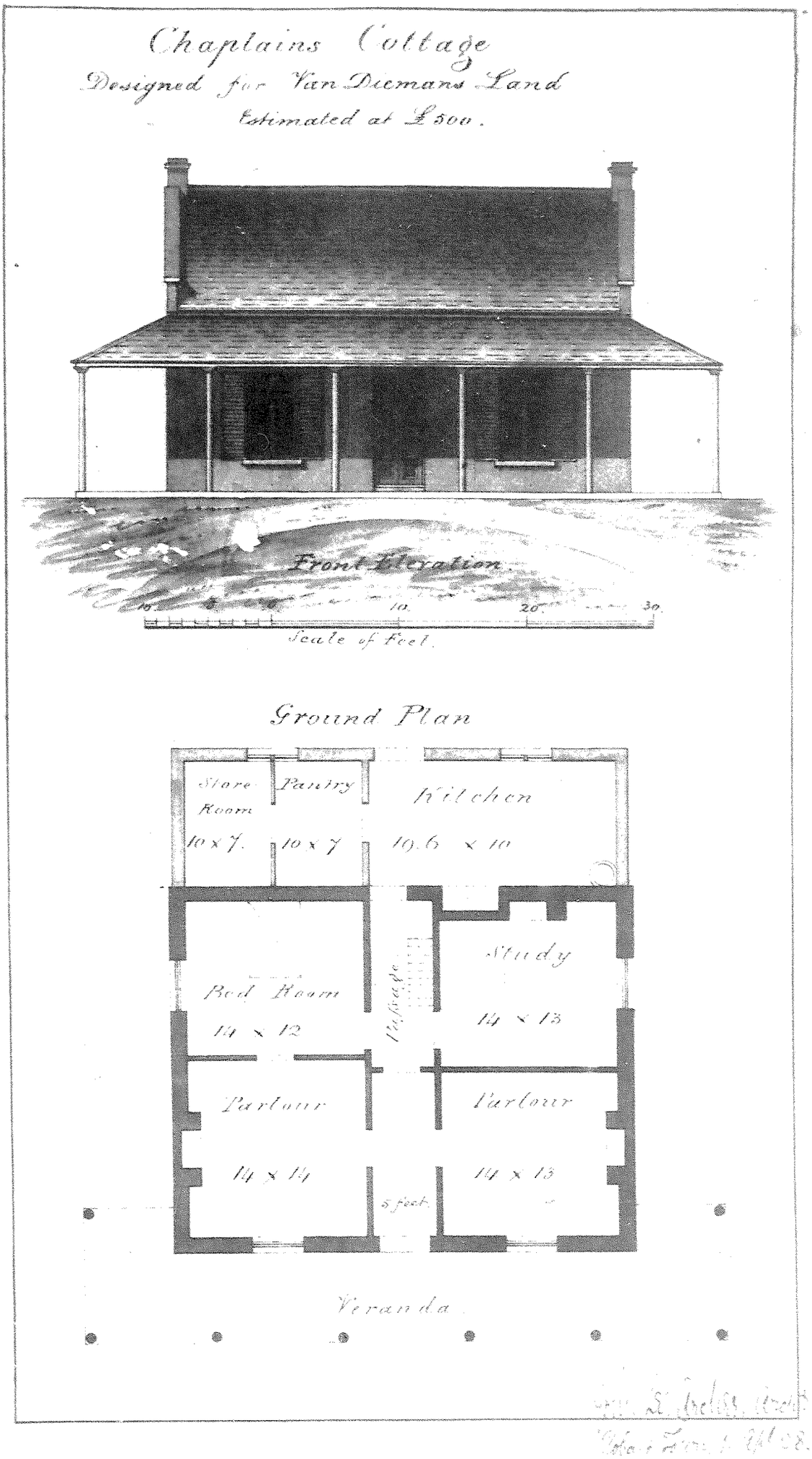

Fig. 7.7 Design for Chaplain's cottage by John Lee Archer, 1828 (MPG 787/2, Public Record Office).

Figures 7.8 and 7.9 the presentability of the town as it stood in 1826-27 is illustrated, confirming the impression conveyed by Evans (Figure 7.3). The distribution of buildings *circa* 1829 (Figure 7.10) involves a street pattern slightly less extensive (in the southwest) than the Land Commissioners' grid, but apart from depicting the first really urban concentration of Hobart Town it provides a valuable detail of building materials. More than 40 percent of the buildings, including nearly all the public edifices, were of brick or stone, indicating a fairly rapid incidence of these more permanent materials since 1819, at which time, according to one observer (16), the gaol-house was the only brick building although free-stone was coming into use. There is no significant areal differentiation of timber from the other materials, outside the solid administration buildings and warehouses of the waterfront vicinity and the additional concentration of the barracks. It might be expected that a higher rate of brick construction in the years immediately preceding the survey would produce a rash of brick on the periphery, but as can be seen from Figure 7.10 sufficient vacant land remained at the centre for the process of infilling to be as active as that of peripheral extension, and so the pattern of materials at this time was haphazard. It was too soon to expect much, or any, impact of the Land Commissioners' examination of the town structure to be apparent, but one observable consequence was the relocation of the Lumber Yard beyond the jetty on Macquarie Point, leaving the barracks areas free for military use.

Widowson (17) turned a critical eye on Hobart at this time, but was able to advise that "on entering the town from the jetty, the stranger will be gratified with the view of so many substantial houses, and well made M'Adamized streets, running at right angles with each other." The houses were generally of wood but almost all new buildings were either of brick or stone, the former of good quality, the latter very dear. The small gardens before each house were, according to Widowson, "usually kept in so slovenly a manner, as to be anything but ornamental to the premises." The rivulet

Fig. 7.8 Sullivan Cove and environs from the Domain, 1827. Note the development of the warehouses on Hunter's Island and the causeway linking it to the shore since Evans' view seven years earlier (Figure 7.3); (Drawing by de Sainson on D'Urville's first visit; in Dr. C. Craig's collection)

Fig. 7.9 View of Hobart Town eastward from the vicinity of Bathurst and Harrington Streets in 1826. In the centre is Government House, and on the right St. David's Church. The aqueduct in the foreground crosses Murray Street on its way from the mill dam at Harrington Street to the mill in Liverpool Street between Murray and Elizabeth (Figure 7.11); (Tasmanian Club collection).

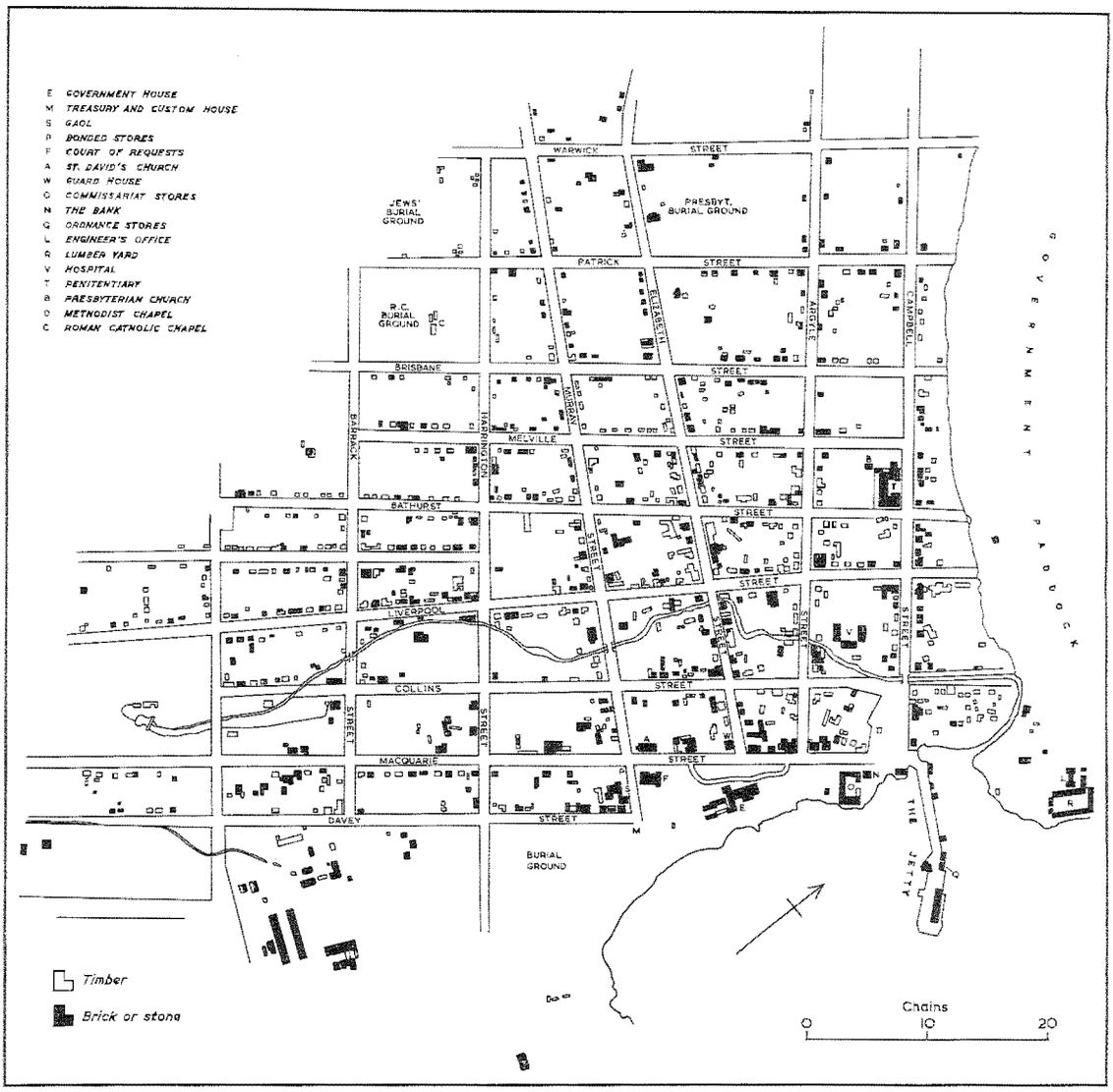

Fig. 7.10 Plan of Hobart Town circa 1829, showing construction materials of the buildings (Hobart No. 5, Lands & Surveys Dept. The distribution of buildings is almost identical with the Plan of Hobart 1829, Intercolonial Exhibition of Industry Chart 1866, Lands & Surveys Dept.).

was an active element in the appearance and function of the town. It "not only amply supplies the town with water", Widowson wrote, "but turns as many mills as will nearly produce sufficient flour for the use of the inhabitants. There are several bridges over the stream, one of which, at the lower end of the town, near the Hospital, is called the Palladio."[35] Several mills can be seen in Figure 7.4, including the Government Mill near Barrack Street, also discernible in Figure 7.10. One was almost in the heart of the town in Liverpool Street near Elizabeth, and Figure 7.11 shows its line of supply from the mill dam at Harrington Street together with a new proposal of 1830 beside the rivulet near Collins and Murray. A few blocks away, where the stream emptied itself and its refuse into the Derwent, the "disgusting nuisance" of the swampy land adjoining had been removed by infilling. Here it was "intended to hold a market, a convenience which has been greatly wanted for a long time," and Appendix XVII shows the state of the allotments around the proposed function in 1831. The hospital, which overlooked the market site at the foot of Campbell Street (Figure 7.10) was described as "a long brick building, standing upon an eminence in a very healthy airy situation: at the back, in some very extensive brick-making fields, is the prisoner's barracks, alias the Penitentiary, alias 'The Tench'."[36]

Widowson's overall view of the town's development was, in general, supported. Mrs. Prinsep found that "the white houses of Hobarton covering a sloping hill under a huge black table-mountain" were "picturesque beyond measure. But the extent of the town, and the size of the warehouses, surprised us not a little."[37] The street pattern was the only example of regularity, "for nothing can be less uniform than the houses, which present every shape and size, from the primitive wooden shed, with its outside counter, to the

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35 H. Widowson: Present State of Van Diemen's Land, pp. 22-4. The author suspected irony in the use of "this celebrated architect" ['s name] for such a structure!

36 Ibid., p. 24

37 A. Prinsep: The Journal of a Voyage from Calcutta to Van Diemen's Land, p. 51

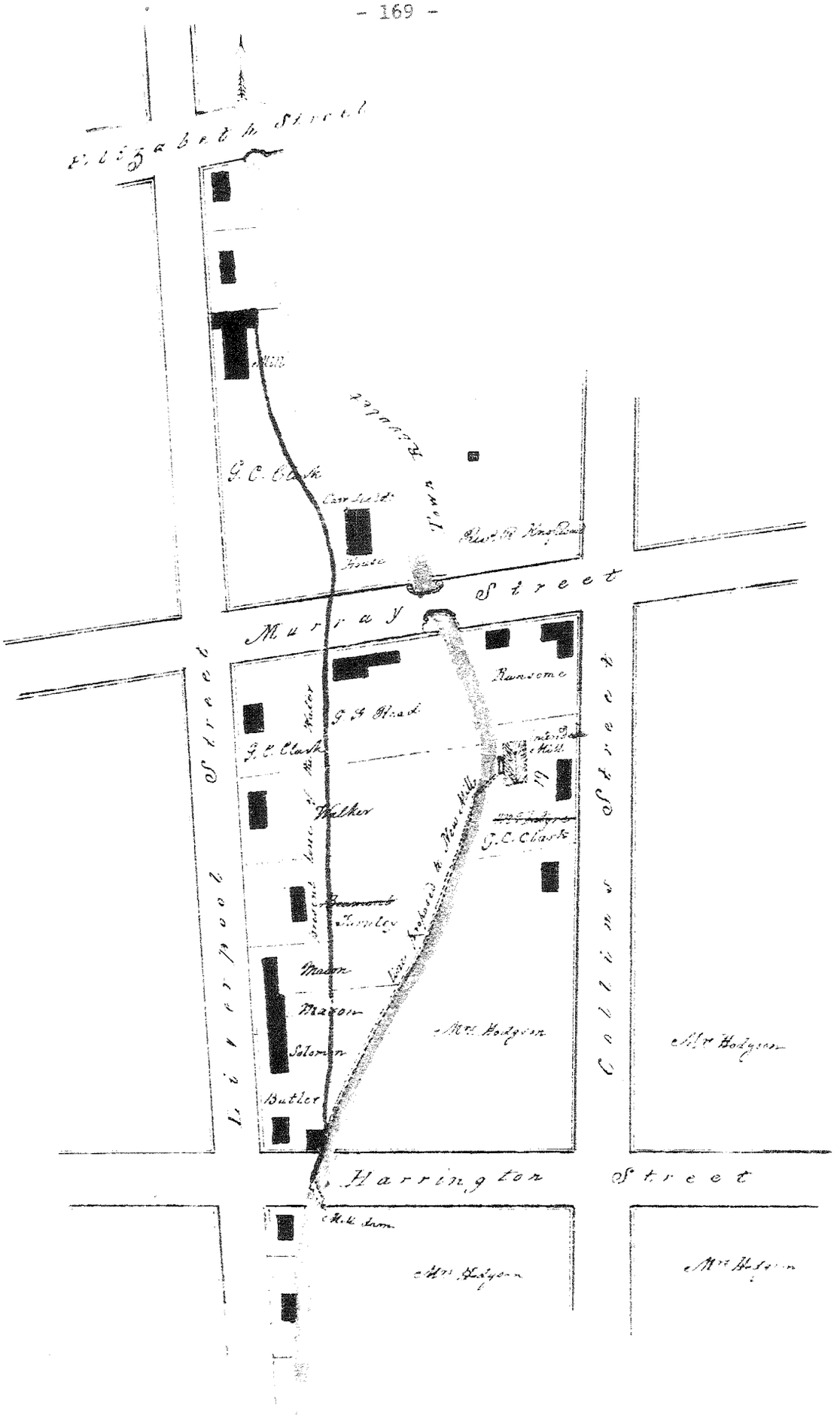

Fig. 7.11 Liverpool Street mill, proposed Collins Street mill and aqueduct, in the town centre, 1830 (LSD 1/103/323, State Archives).

smart London haberdasher's shop."[38] Macquarie Street contained "the houses of official persons" as well as public buildings, and Elizabeth Street contained "the best shops", but even more interestingly Mrs. Prinsep found that the houses are more and more detached, and smaller, as you recede from the town, the richer people advancing....to the centre of attraction, and leaving their former cottages of two rooms, in the outskirts, to others, to commence the same routine of successful industry"[39]: an inversion of more recent trends from centre to periphery which underlie Hoyt's hypothesis, and to a lesser extent that of Burgess.

The Expansionist 'Thirties

Population was growing apace during the 1830s so that the 6,000 at the beginning of the decade had become 14,000 by 1836. For this reason the comments of even reliable observers made from experiences a few years apart could easily be in conflict with each other and with sporadic statistical evidence. Dependability is more difficult of assessment when the observer's comments cover a whole span of residence during which deficiencies of settlement were remedied at various unspecified times. Nevertheless the published comments are valuable indications of contemporary impact, and some must have influenced the flow of free settlers from Britain -- at least of those who could read. Dixon's decade of residence from the latter 'twenties embraces both Widowson's and Prinsep's experience in a generally burgeoning period of urban formation (18). He considered that "The town is laid out with judgement. There are about twenty streets, all wide .... All the streets are macadamized, and none are flagged. The passengers confine themselves to no particular parts, but walk as often in the centre of the street as on either side [little changed after 130 years,

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38 Ibid., pp. 59-60. Of course Mrs. Prinsep overlooks the unifying influence of Georgian architecture the existence of which is clear from Figures 7.3, 7.8, 7.9.

39 Ibid., p. 60

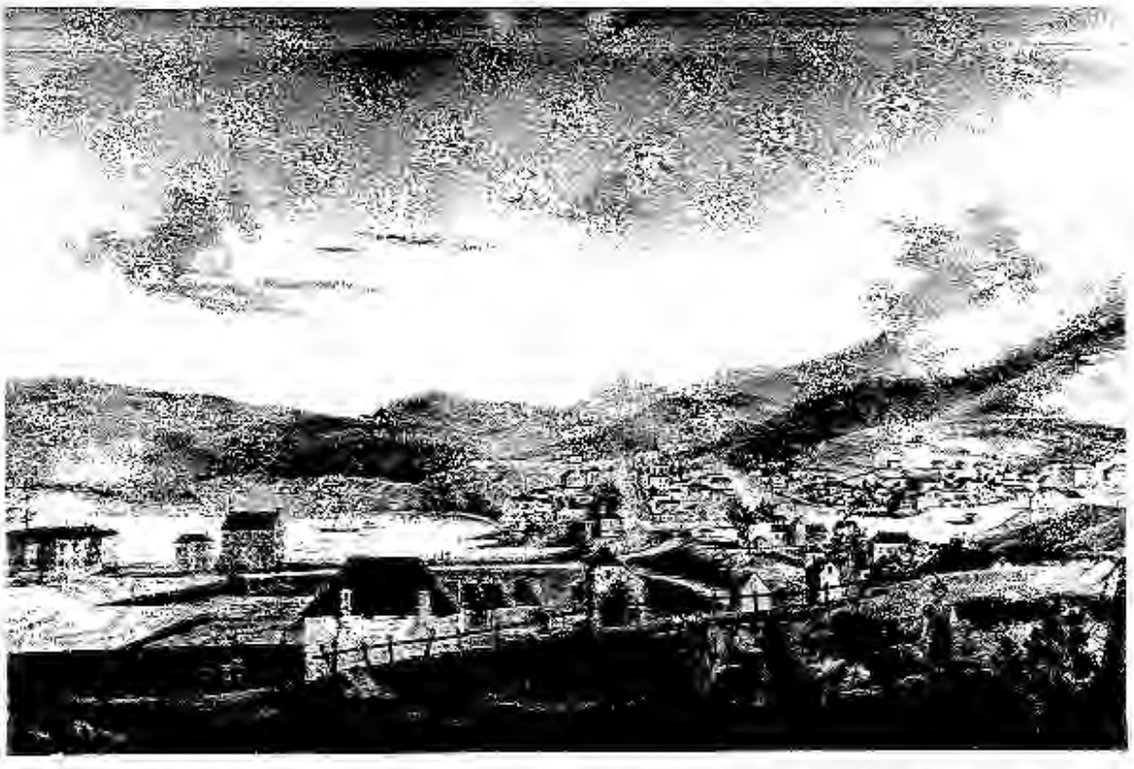

Fig. 7.12 Hobart Town southwest from Macquarie Point, 1827. The view follows Macquarie (with St. David's Church) and Collins Streets. The Domain and Hobart Town Rivulets enter the harbour alongside the causeway. (Drawing by de Sainson; in Dr. J. Craig's collection)

Fig. 7.13 A nearer view along Macquarie Street, 1830. The Commissariat Store stands between the foot of the street and the Cove. The Barracks surmount the hill at back left (Benjamin Duterrau watercolour; Tasmanian Museum).

Fig. 7.14 The town around lower Elizabeth Street, 1838. Government House blocks the way to the waterfront. St. David's is again prominent at right, though its pointed steeple was replaced by a cupola structure in 1868 (Benjamin Duterrau watercolour; Tasmanian Museum).

Fig. 7.15 North Hobart in the valley between the Domain and Knocklofty, with Mt. Wellington at rear. Westward from the Domain, 1836 (Benjamin Duterrau watercolour; Tasmanian Museum).

considering increased vehicular traffic!] .... The houses .... instead of being slated, are roofed with shingles .... they are planted too often in zig-zag positions."[40]

That the main street frontages had developed truly urban regularity there is no doubt (Figures 7.10 and 7.12 - 7.14), although the irregular intra-block development and very varied occurrence of buildings and vacant allotments beyond a few inner blocks provided ample substance for related comment.

The effects of 1830s development of the town as a whole are best seen by a comparison of period plans. Frankland's well-known 1839 map of V.D.L. carried an inset which despite its small size and not very large scale (c. 9" x 8" and 1500 ft to 1 inch) showed the distribution of individual buildings on their allotments. Comparing this (Figure 7.16) with the 1829 distribution (Figure 7.10) we find a doubling in area of the town blocks served by streets, from about 500 to 1000 acres, mainly by the alienation of land on the northern and western boundaries of the 1829 coverage. The new town land was not uniformly occupied. In the south, buildings spread beyond Molle and Antill Streets to the town boundary at Elboden and Garden Crescent at comparable densities with the established adjacent blocks, while in the north between upper Murray Street (Veterans' Row) and Campbell the former general limit of Warwick was pushed forward to Burnett and the town boundary line of Arthur Street. But in the northwest the substantial tract centred on Hill Street, though divided into allotments, was coarsely sub-divided and had only the lightest sprinkling of habitations. This was particularly true of the land rising sharply westward from Hill Street to Knocklofty Terrace, with the semi-circle of Crescent Fields (between Lansdowne Crescent and Hill Street) being quite untenanted.

Battery Point now had the beginnings of non-military occupation,

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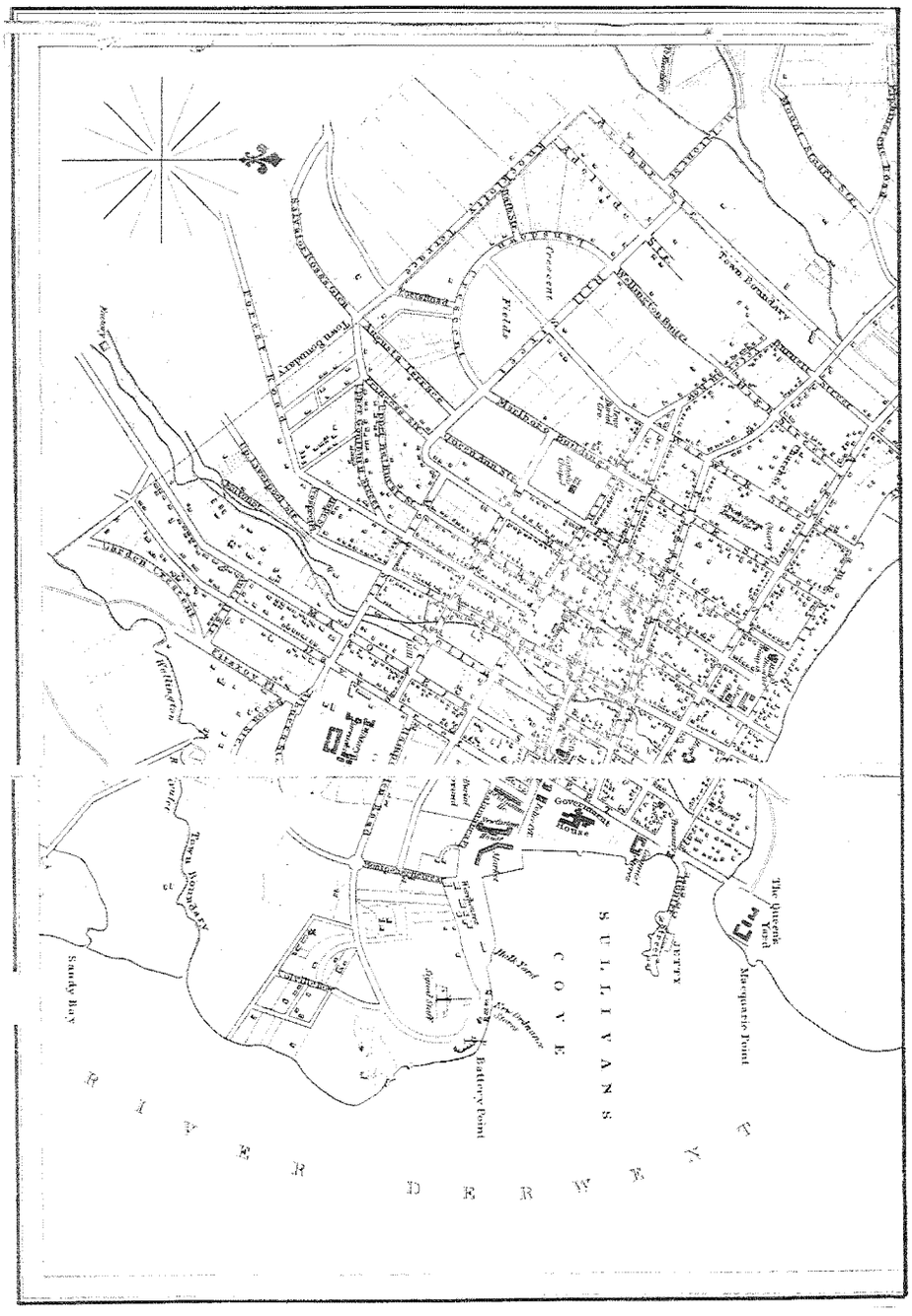
40 J. Dixon: The Condition and Capabilities of V.D.L...., pp. 49-50


SULLIVANS
COVE
Battery Point
Sandy Bay
Macquarie Point
The Queens Yard
Town Boundary
Government House
Hobart Town
Salamanca Place
Queen Street
Macquarie Street
Liverpool Street
Murray Street
Harrington Street
Argyle Street
Collins Street
Elizabeth Street
Campbell Street
Davey Street
Fields
Pier
Jetty
Wharf
Store
Dock Yard
Hulk Yard
Gaol
Barracks
Church
Public Buildings
Town Boundary
Government Domain
Government Paddock
Government Garden
Government Farm
Government Cottages
Government Stables
Government Offices
Government Wharf
Government Store
Government Dock Yard
Government Hulk Yard
Government Gaol
Government Barracks
Government Church
Government Public Buildings

south of Hampden Road around Colville Street, though the southern slope of the hill down to the town boundary at Wellington (later Sandy Bay) Rivulet remained largely open country. The state of settlement just a year before Frankland's record is shown in Figure 7.17. Cromwell Street and its famous mill had not been formed, land east of Montpelier Retreat and north of Hampden Road was apparently in cultivation, and the foot of the cliff cut back from New Wharf awaited the new warehouses with the 'front line of stores' marked. By the time of Frankland's plan five had been added, and the mill (with its sails symbol) stood in Cromwell Street. The establishment long since of farms along the lower Derwent meant that communication with this area was necessary. Jeffreys reported in 1820 that the Sandy Bay farms extended about five miles downstream, and Prinsep later wrote that "the foot of Mt. Nelson is entirely laid out in gardens, fields, and little farmhouses, supplying Hobarton with plenty of fruit and vegetables"[41] — a less dismal view than that of the Land Commissioners. Communication was achieved by way of Davey Street to the Barracks, thence Byron Street to what is now Sandy Bay Road. Rowntree (19) reports that this route reached the Queen Street bridge in 1824, but despite plans to extend the connection and alternatively to encircle Battery Point the settlers petitioned in 1834 to have a passable road to ensure dependable access to the town's market for their products.[42] Montpelier Retreat had not, by the time of Frankland's plan, extended continuously to the Wellington Rivulet to make an alternative connection with the southern outposts of settlement, but this deficiency had been remedied by the time of Sprent's survey in the early 1840s. The rural scale of holdings is indicated by Figure 7.18, although comparison with the 1808 distribution of grants to Norfolk Islanders[43] shows that the alienation even then extended to the southern extremity of the area depicted. Interestingly, Folger's 100 acres, Hall's 50 acres and

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41 A. Prinsep: op. cit., p. 58

42 A.& F. Rowntree: The Early Settlement of Sandy Bay, p. 10

43 Ibid., between pp. 16 & 17. Evans lists the 35 grantees in the Queenborough district south of the town in 1821; op. cit., p. 125.

Fig. 7.17 Battery Point and Sullivan Cove, 1838. Between 'New Wharf' and the cliff cut back from the quayside the 'front line of stores' is marked. Rev. Knopwood's first Cottage Green is shown, on the west side of Montpelier Retreat (MPG 704, Public Record Office).

Chaffey's 60 acres were in the same hands in 1836 as in 1808, and other settlers offering in 1835 to contribute to the cost of extending the road beyond its two-mile course carried the same family names as the first land-owners. As the petitioners for road improvement considered their grants mainly inadequate for sheep or cattle rearing and were thus confined to tillage and wood-cutting, their disinclination to part with these holdings suggests a deep appreciation of the beauty of the district and/or the potential value of the land for urban subdivision. Dixon, who left the colony "only because its prosperity had decayed," saw the departure from the land granting system and the introduction of selling land to the highest bidder as the cause of the decay.[44]

On the other side of the developed town land the New Town district was not standing still, and usually attracted comment. Prinsep found "the hamlet....prettily mixed with trees, upon the banks of a small rivulet" but had harsher words for the "long narrow peninsula between Newtown and Cornelian Bay [where] there is a miserable little wooden building surrounded with poultry, dignified by the name of Government Farm."[45] On the other hand the lady reported the sale of their 150 acre farm for £3000, and speculated (from New Town grape-growing experience) on Tasmania's rivalling the vineyards of France. Nine years' acquaintance from 1839 led Mrs. Meredith (20) to write of "Newtown .... where many of the wealthier merchants, government officers, and professional men have tasteful residences",[46] suggesting the characteristics — in the second quarter of the nineteenth century, note — of a dormitory suburb. A sketch survey of the area between and behind New Town and Cornelian Bays shows tentative development and integration (Appendix XVIII). The Bishop's Glebe of 33 acres had been assessed as 'poor soil' except for a creek-side strip of 'good land'. On the peninsula the two main northern blocks were 'good land' while the lower half of the 92 acres (to the dotted line)

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44 J. Dixon: op. cit., p. 63

45 A. Prinsep: op. cit., p. 67

46 Mrs. Charles Meredith: My Home in Tasmania, vol. 1, p. 25

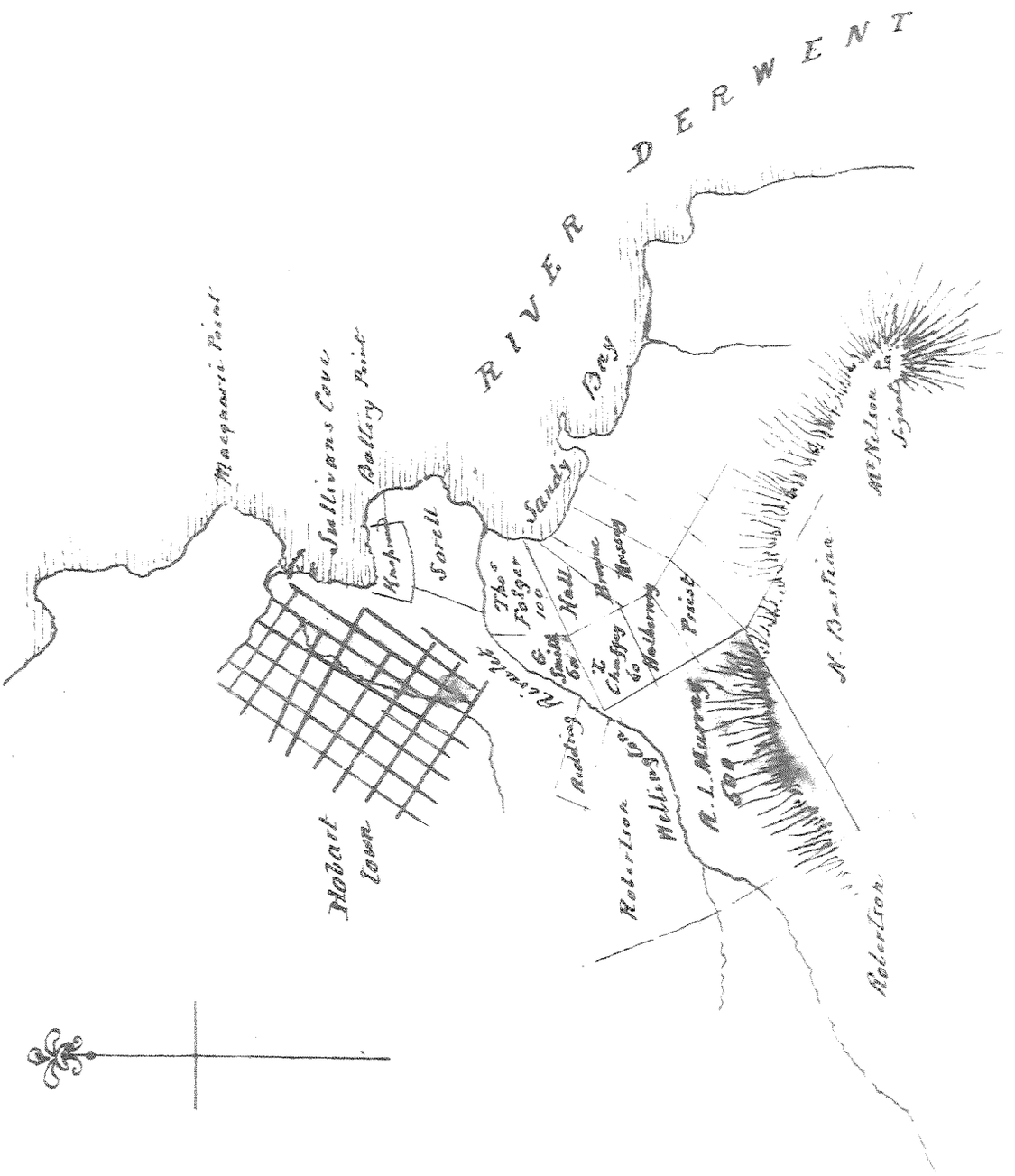

Fig. 7.18 Land-holdings south of the town, 1836. Lots were still in the order of 100 acres each (CSO 1/867/18344, State Archives).

was described as 'poor gravelly soil'. To the west of the main road was the Orphan School, and the Bay Road leading south to the main (New Town Road) throughfare increased access to this still rural locality.

Back in the town preparations were in hand, during the 'thirties, for various improvements, and evidence suggests that official awareness was high. For example, in 1836 the Surveyor-General wrote, doubtless with port developments in mind, concerning the lack of improvements to wharf allotments at the rear of the Colonial Treasury "allotted to different individuals for building purposes" "some considerable time ago." He suggested to the Government that the owners be entered into a collective bond to fill in the sites as soon as "the Bridge at the end of Macquarie Street has become sufficiently advanced as to be available for Carts" to carry filling to and fro. He then urged the early commencement of the bridge (across the lower rivulet) "before the warm season sets in, as the Exhalations which will arise at that time of the year, if it is allowed to remain in its present state, will no doubt produce Fear and other dangerous effects to the Inhabitants of this populous Metropolis."[47] The rivulet, and the water supply generally, were indeed the subject of concern.

Water Supply Problem

Although the 1834 almanack described the town as "chiefly watered by means of pipes that have been laid underground, and which convey water to the houses of the inhabitants, as well as to several public pumps in various parts of the streets",[48] that of 1836 summarising the history of the island from 1824 wrote of attempts by the Hobart Town population to get an adequate pure water supply. The rivulet, on which the population was totally dependent, dried up in summer and was also used as a sewer. In

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47 Frankland, 28.9.1836, CSO 1/901/19134 (21)

48 Melville's Almanack, 1834, p. 4 (22)

these circumstances the majority of the townspeople suffered "the most lamentable sickness....summer after summer, mainly owing to the impurity of the water which nine out of ten of the inhabitants are compelled to drink."[49]

A public meeting in 1835 drew attention to these matters and to the fact that the Government had been petitioned for ten years for improved water supply. The aqueduct was the subject of some bitterness, for "having been made at the public expense fully capable of supplying the wants of the public", its water had been "most wantonly wasted, and misapplied."[50] After serving most of the Government officers [near the Barracks], it "turns from the town, and conducts the surplus water alongside and through the celebrated Cottage Green estate, the property of Colonel Arthur."[51] The petition was not immediately productive, neither was it ineffective, for by 1841 a map "Illustrative of the Proposed Mode of Supplying Hobart Town with Pure Water" had been produced (Figure 7.10). Two aqueducts were to tap the Hobart Town Creek (Rivulet) and the interfluve between it and the Sandy Bay Rivulet, joining at Elboden Street to feed pipelines running along Davey and Macquarie Streets. From these a series of mains would serve all the lower-lying streets between Barrack and Campbell, that along Elizabeth Street extending northward beyond the town boundary, the Liverpool Street line going on to skirt the Domain to the Government House site, and others following Hampden Road into Battery Point and Montpelier Retreat across the waterfront. Clearly it was not proposed to push the supply up into the hilly area north and west of Harrington and Bathurst Streets, as yet scantily settled.

In 1847 we find 2,000 residents of Hobart Town publishing a further memorial (25), this time after Governor Denison had given

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49 Melville's Annual, 1836, p. 198 (23)

50 Address by the inhabitants of Hobart Town to the Governor, in H. Melville: The History of VDL, p. 165 (24)

51 H. Melville: op. cit., p. 166

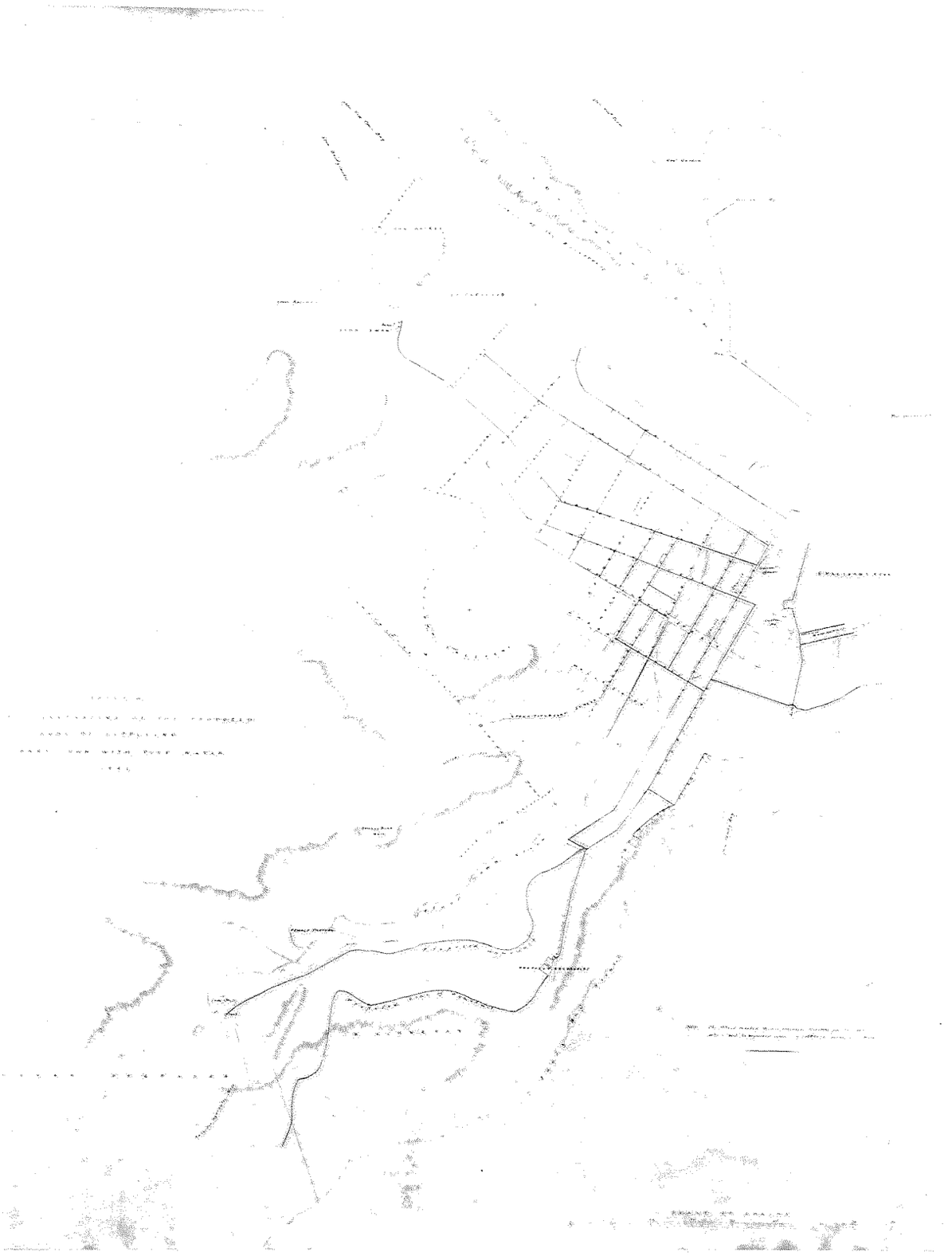

Fig. 7.19 Water reticulation proposal for main Hobart streets, 1841. Two aqueducts between the Hobart Town and Sandy Bay Rivulets were to feed the system (MPG 711, Public Record Office).

their document a cool reception and it had been forwarded to the Secretary of State. The burden of their complaint was the encroachment upon the public's right to water by Peter Degraves, mill and brewery owner. It is pointed out that in about 1834 water was diverted (for the purpose of driving Degraves' corn mill) from the tunnel constructed in 1831 from the foot of Mt. Wellington (in the southwest corner of Figure 7.19) to take the Rivulet water to the town, but that this was a relatively minor encroachment. They continued: -

> "Your Memorialists have to complain of the Measures entered upon in the early part of the year 1844 for the purpose of conducting to Hobart Town, by means of an Aqueduct and Pipes, the water which passes over the Wheel of Mr. Degraves' lower Flour Mill, and the subsequent unauthorised closing of the Tunnel by Mr. Degraves, whereby the sole supply of Water for the City is limited to that which has passed through his Establishment, and over his Water Wheel; so that the Water is not only deteriorated in quality, but the quantity supplied has been found insufficient for the use of the Inhabitants of the City and the Shipping in the Port."[52]

Degraves' interest, the memorialists contended, was " to reduce the supply to the lowest possible quantity to prevent competition on the part of individuals engaged in similar manufacturing pursuits,"[53] and they requested re-opening of the tunnel and a full supply of water from a point above Degraves "by such a course as will prevent it from being interfered with," any surplus after meeting the needs of the town to be rented to mill-owners and others.[54]

While this important matter awaited solution the now established town was cast in the mid-century mould analysed in Part 1. The boundaries shown in Frankland's plan of 1839 were little changed by the time of Sprent's survey, nor even by 1847, despite significant population growth through the 'forties. Perhaps the defined town boundaries exerted a temporary restraint on further areal expansion, and possibly water supply and communications links with the centre were influences inhibiting additional dispersion until existing

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52 The Right of the Inhabitants of Hobart Town to an Independent Supply of Pure Water, p. 4

53 Ibid., p. 5

54 Ibid., p. 9

surface coverage was uniformly denser. A close comparison of Figure 7.16 with Figure 1.3 reveals considerably increased building in the central blocks, and notable development on Battery Point. A plan for extending the street pattern in this area is shown in Figure 7.20, though it was varied to provide for Arthur's Circus. Several streets were added in the north and northwest of the town, but the immediate increase in occupance was not striking.

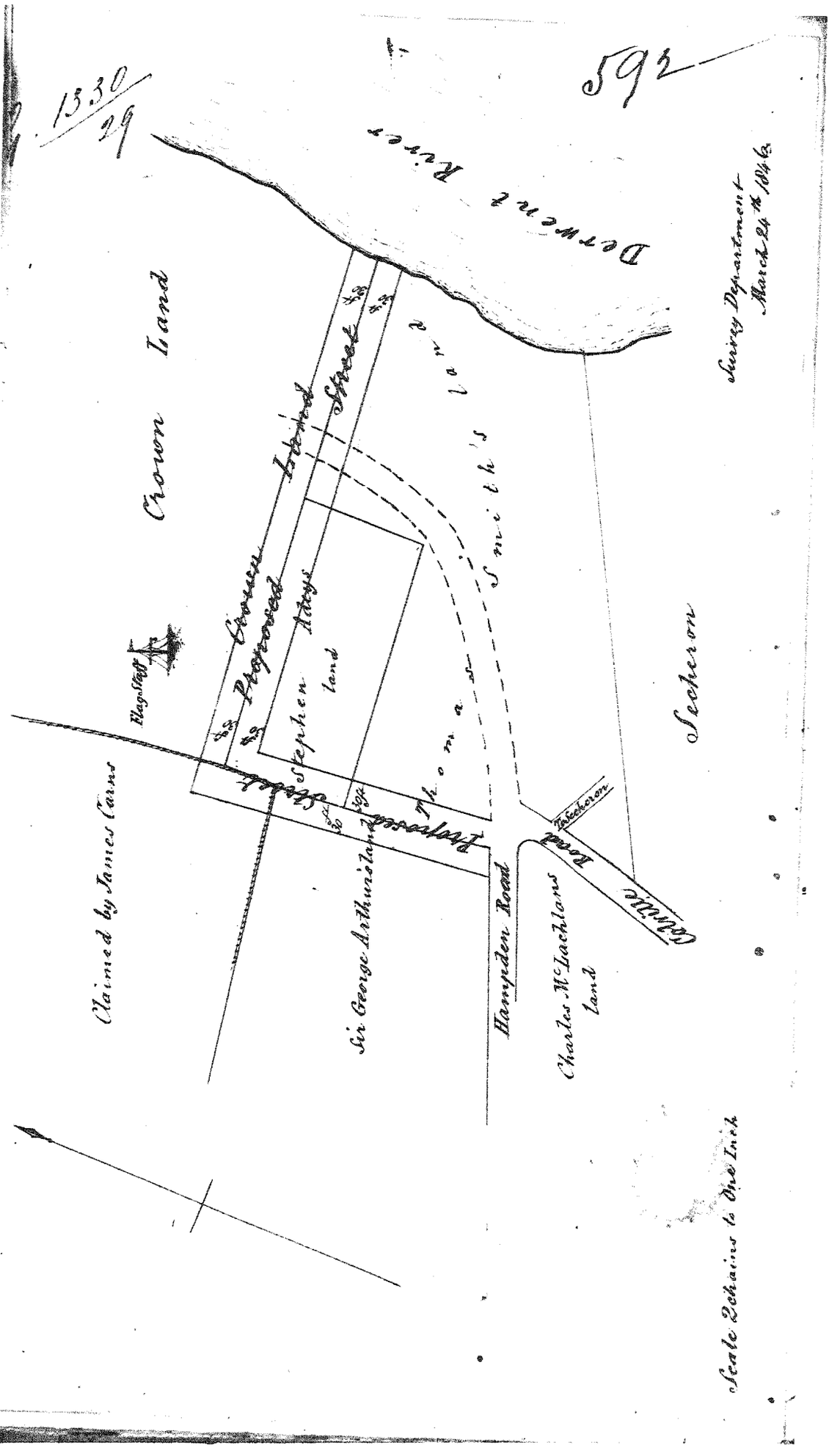

Fig. 7.20 Proposed street developments between lower Hampden Road and the military area on Battery Point, 1846 (LSD 1/20/592, State Archives).

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Chapter 8

Port Development and Trade

If international competition for footholds in the South Seas was responsible for the founding of a settlement somewhere between Port Jackson and southern Van Diemen's Land, and the flow of convicts from Britain was important in sustaining the settlement once established, no single factor was more influential in the choice of site and the continuity of development than the port.

The vital role of ports in regional development and inter-regional trade needs no elaboration here with the availability of studies such as those of Morgan, Klimm, Bird and Thoman (1, 2, 3, 4). The changing morphology and function of ports over long periods have been less frequently investigated, though notable examples are on record, including those of Clark, Kinniburgh, Weigend and Elliott (5, 6, 7, 8). There are sufficient recurring features in the course of individual developments to suggest that a definite evolutionary process has been followed, but this theme has been earlier expounded (9) and the present purpose is to examine Hobart's port development as an integral part and a prerequisite of total urban growth. That many towns evolve in the absence of port facilities need not divert our attention, beyond recognising that the direction of growth must be promoted by other functional components and the underlying forces are likely to be more heavily internal or local.

Natural Advantage and the Lighterage Stage

The waters of Sullivan Cove were generally in excess of four fathoms depth at the time of Hobart's founding; over much of the area considerably so. To this was added the lasting advantage of outstanding natural approaches along the drowned valley of the Derwent:

> "The entrance to the River Derwent from Storm Bay is 2 1/4 miles wide, with depths of eight to ten fathoms, and a width of two miles is maintained throughout the distance of eleven miles to Hobart. The soundings in mid-channel increase to twenty fathoms at 5 1/4 miles above the entrance, thence decreasing to twelve fathoms off Sullivan Cove. Depth of water alongside wharves ranges from six to ten fathoms (all depths L.W., O.S.T.)"[1]

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1 Marine Board of Hobart: Annual Reports

As seen in connection with Collins' appraisal of the settlement site, the early focal point in port activity was Hunter's Island. It measured approximately 520 x 130 feet and lay about 600 feet from the mouth of the Hobart Rivulet (Figure 8.1). A spit linked the southern bank of the stream with the island at low water (there is a suggestion of this in Figure 8.2, but Figure 6.5 shows it much more clearly), and the stores landed on the island from the ships in the bay were transferable by foot to the camp. They were strongly guarded, however, and "the most minute regulations were laid down for the issue of stores and provisions, only one person at a time being allowed to come up to the store tent."[2] Further, those who landed at the jetty built on the tip of the island were not permitted to linger on the island, and "no boat was allowed to land passengers at the jetty or come into the creek after sunset." The fact that the spit was covered at high water was therefore an added protection during the founding period. Inevitably the advantages of permanent access became paramount as improved buildings were erected, but the fact that the spit was converted into a causeway only after 1820 may be a measure of their relatively insubstantial quality before that time.

The link between the island and the mainland was itself described as "a substantial causeway of masonry, wide enough for two carts to pass, and a good path for foot passengers"[3] (see Figure 7.8). This was a decided advance on conditions in 1820 when Lloyd found shallow water and soft mud separating the two land areas. "Those who would not wade were duly shipped upon the backs of brawny sailors, whilst the ladies were conveyed in sedan-chairs, made of the willing hands and sinewey arms of two able seamen"[4]. By 1822 Hunter's Island had been equipped with three small wharves,[5] but the sailing ships lay out in the bay and unloaded their goods into small boats.

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2 J.B. Walker: The founding of Hobart by Lieut. Governor Collins, Early Tasmania, pp. 72-3 (10)

3 H. Widowson: Present State of VDL, p. 21 (11)

4 G.T. Lloyd: Thirty three Years in Tasmania and Victoria, p. 7 (12)

5 Hobart Town Gazette, 10.8.1822, p. 1

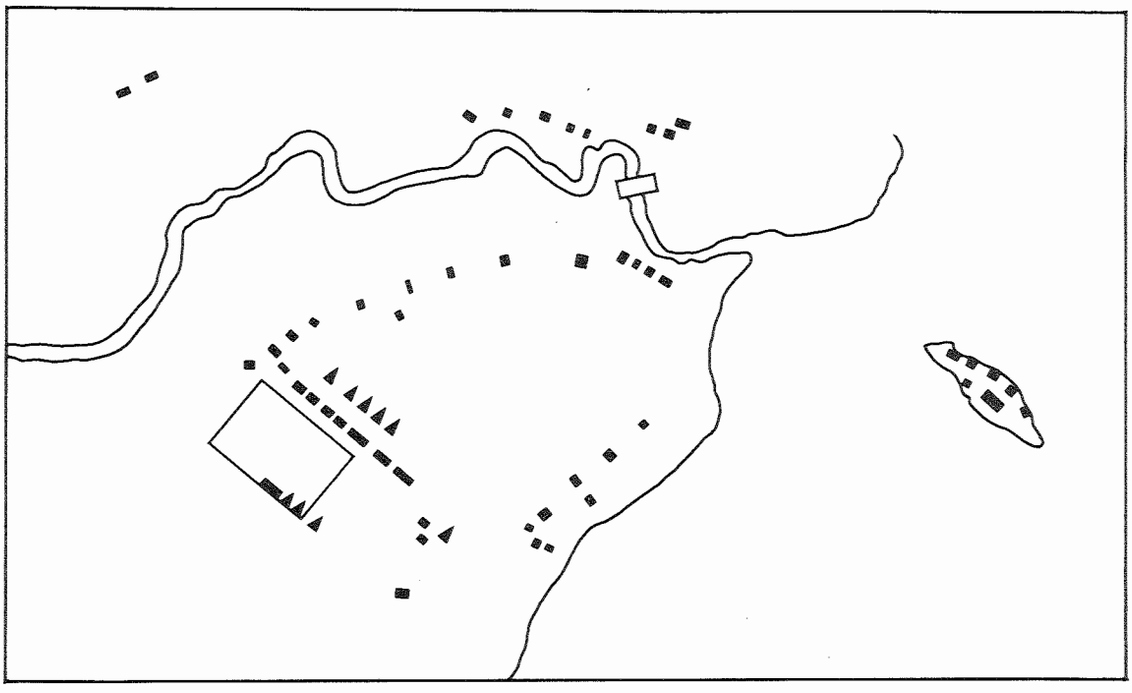

Fig. 8.1 The Hobart Town settlement in 1806. Hunter's Island appears as a separate entity. Rather more buildings are shown here than on the later drawn sketch of Figure 6.5 (Plan of Hobart 1806, Intercolonial Exhibition of Industry Chart, 1866, Lands & Surveys Dept. The origin of this plan was probably Harris's survey, reproduced in Walker's Early Tasmania).

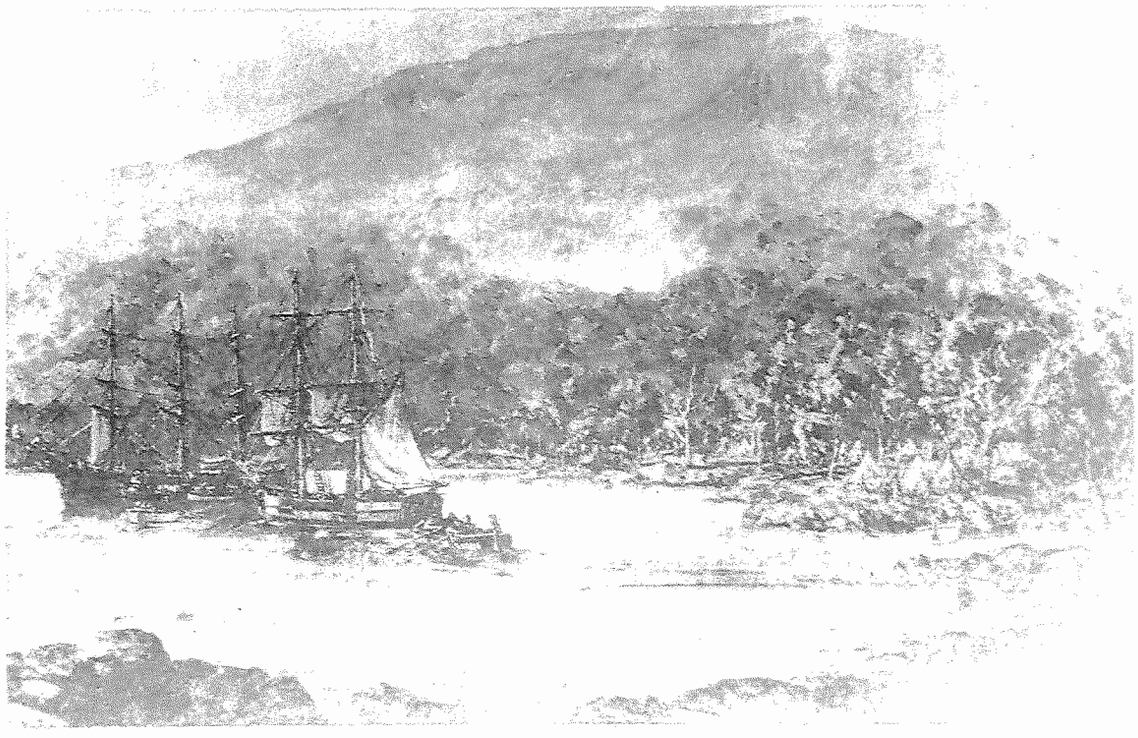

Fig. 8.2 Sullivan Cove in 1804. The settlers' tents can be dimly seen among the trees. Hunter's Island and the spit are in the foreground (Tasmanian Museum collection. A similar and rather clearer view from the Dixson Collection is reproduced in Pearce and Pearce's Hobart Town Album, 1967).

Considering the military detention character of the settlement and the small initial population it is not surprising that little real development of the port took place in the first decade or so. There was, however, a positive restraint of trade which ensured the postponement of the commerce whose potential Collins had dilated upon even before his arrival. Merchant ships were forbidden entrance to the Derwent until 1813. "The masters of vessels sailing from Port Jackson for Van Diemen's Land had to enter into a recognizance of £100, and two sureties in £50 each, to be forfeited if they landed any person or took anyone away without the Governor's written permission."[6] One protagonist of V.D.L. (13) saw Macquarie's order closing the harbours to trading vessels as a move "to prevent the principal settlement of Pt. Jackson from being entirely dependent for its foreign supplies on these two subordinate settlements, viz. The Derwent and Port Dalrymple"![7] Although the privilege of the East India Company to a monopoly of trade between England and places east seemed a more likely explanation, Macquarie wrote in response to a memorial from the inhabitants of Hobart Town, as follows:-

> "On the subject of opening that Port .... they however seem to forget that, if I were to grant their request to the full extent, that the Mother Colony of Port Jackson would become entirely dependant on the small subordinate Settlement of the Derwent for all their principal Supplies from England, India, etc., etc."[8]

The steady increase in ships arriving after 1813 (Table 8A) indicated the effects of lifting the prohibition.[9] The inconsistent recording of tonnages in the years before 1830 makes the sequence of average ship size less reliable than it might have been, but the pattern was fairly clearly one of fluctuation above and below about 150 tons until the mid-'twenties, when a progressive increase pushed the average beyond

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6 J.B. Walker: op. cit., pp. 73-4

7 T. Kent: A Letter to Barron Field, Esq..., p. 63. Kent went on to use the word 'Tasmania', and in a footnote entreats "the pardon of my readers for coining this word. It sounds better by the side of Australasia than Van Diemen's Land".

8 Macquarie to Geils, 1.6. 1812, Historical Records of Australia, Series 3, Vol. 1, p. 483 (14)

9 Bathurst rescinded the regulation confining all ships' cargo discharge in NSW or its territories to Port Jackson in July 1812, and Macwuarie published orders to that effect on 19.6.1813 (HRA, 3,1, note 235, p. 826).

300 tons in 1830, for the first time. These increases in traffic frequency and in the size of the carriers had obvious implications for port provision. The fact that "the depth of the harbours has been

Table 8A

Shipping Arrivals at Hobart 1803-1830

Year	Ships Calling		Average tonnage recorded	Year	Ships Calling		Average tonnage recorded
	Total No.	% for which tonnage recorded			Total No.	% for which tonnage recorded	
1803	5	60	43	1817	21	29	55
1804	16	56	110	1818	28	21	72
1805	16	81	240	1819	33	28	128
1806	17	65	135	1820	43	19	137
1807	13	77	223	1821	38	13	147
1808	18	61	188	1822	59	7	152
1809	11	36	178	1823	72	10	156
1810	9	56	186	1824	54	13	90
1811	3	100	173	1825	79	38	140
1812	13	54	273	1826	87	76	165
1813	14	57	172	1827	107	80	185
1814	15	33	141	1828	79	75	257
1815	15	13	122	1829	73	79	295
1816	19	21	161	1830	71	99	314

Source: Compilation of shipping arrivals 1803-56 (15) and Records of ships entered in and cleared out at Hobart Town 1824-30 (16)

running a race with the draft of ships for several centuries"[10] alone ensures the development of handling facilities in established ports, though in the light of Sullivan Cove's generally deep water and the still-small size of vessels using it, the response was in the direction of fixed berthage for an increasing volume of traffic. With the population of the town in the vicinity of 6000 by the close of the 1820s and with the addition of some outbound commodities to the initial exclusively inward flow, the need for more formal port facilities was well founded.

Marginal Wharves

The limitations of the Hunter's Island area of exchange were

10 L.E. Klimm: Man's ports and channels, p. 527 (2)

recognised sufficiently in rapidly growing Hobart Town of the 'twenties for development plans to be drawn up. There were two obvious areas of potential improvement: the southern and western shores of the Cove. The latter was occupied centrally by Government House and the Governor's Jetty, and the shore adjoining the Commissariat Stores was already used as the Government Wharf, so that it was to the Battery shore that attention was first directed. This had the added advantage of protection from southerly and southwesterly winds, the water inside the 'general line of the sea breeze' shown on Figure 8.3 (near the cross-section line CD) being a favoured anchorage, together with deeper water than at the northern end of the bay.

The construction of the New Wharf (the Hunter's Island area becoming the Old Wharf) introduced the second stage in Sullivan Cove's evolution as a port: that of marginal wharves. In Figures 8.3 and 8.4 we see the state of the port in December 1827, and John Lee Archer's plans for building out the shore line to a quay wall beyond the Naval Officer's Jetty. The development involved the then considerable task of cutting back 100 feet into the dolerite slope of the allotments comprising the area once held by Rev. Knopwood. Sufficient level land was provided by the operation to allow the subsequent erection of the Salamanca Place warehouses with ample remaining space for traffic movement. This was the culmination of resumption, negotiation, and construction which began with a 33-foot wide roadway resumed through the Cottage Green property to give access to the Mulgrave Battery established by Gov. Sorell in 1818; continued with the 1825 offer of the land-owning merchants to Gov. Arthur "to cede to the Crown a space of 87 feet in front of their respective lots in addition to the 33 feet roadway ... on condition that the whole quantity of 120 feet in breadth from high-water mark be applied to construction of a road 60 feet wide and the remainder used for public purposes only"[11] and entered the final stage with provision to lower the new 60-foot road to the wharf level and to engage a gang of not less than 100 men on the excavation. The rock obtained was used to improve the swampy corner on which Parliament House

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11 W.E. Masters: The early history of Salamanca Place, P. & P., Roy. Soc. Tas., 1944, p. 129 (17)

Fig. 8.3 State of development of the town and port in 1827. Signed 'John Lee Archer, Engineer' (MPD 117/3, Public Record Office).

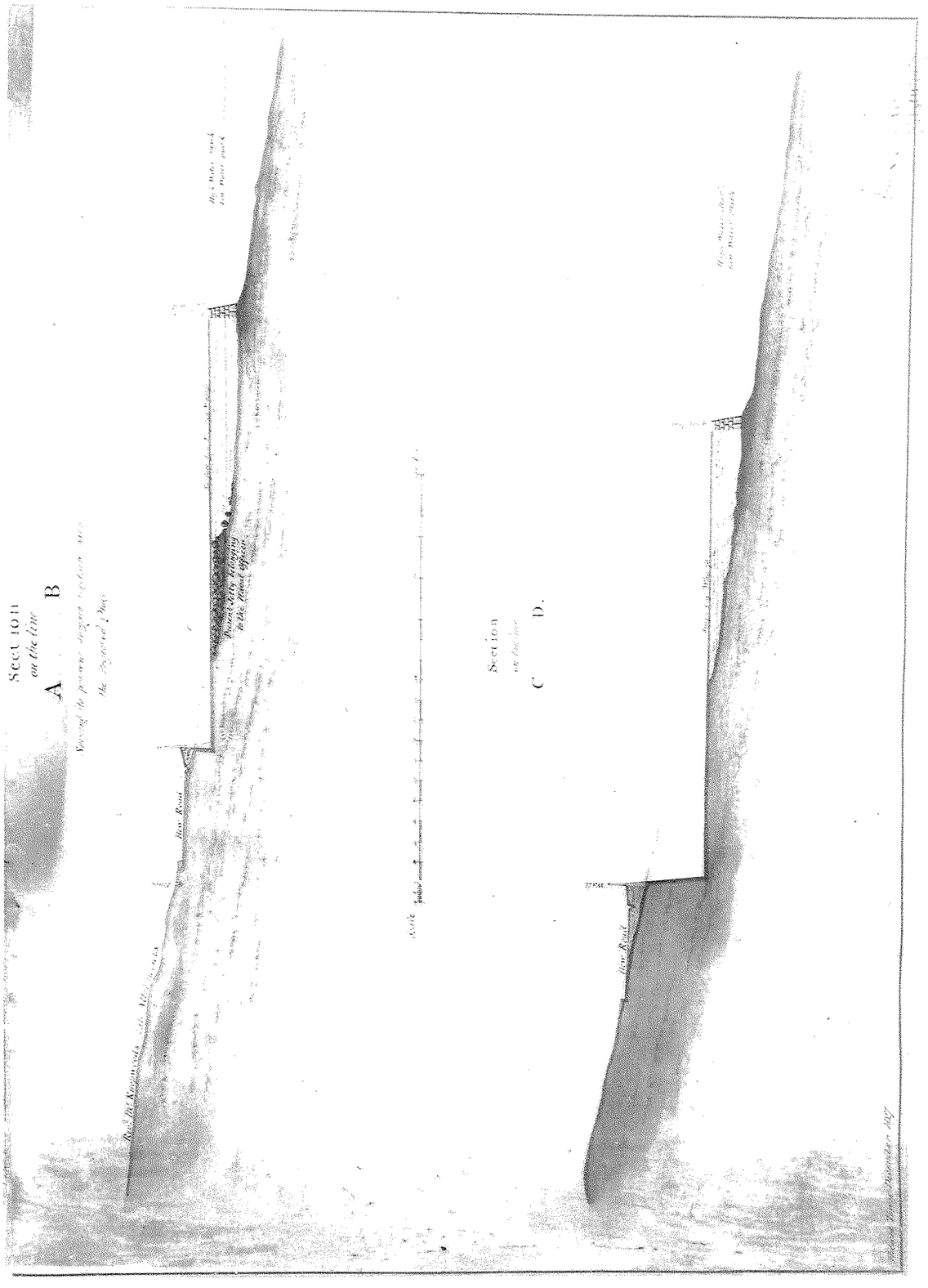

Fig. 8.4 Sections for the construction of New Wharf along the northern shore of Battery Point. The lines of the sections are shown in Figure 8.3 (MPD 117/1, Public Record Office).

now stands as well as to extend and straighten the shoreline to form New Wharf. Work began on the quay in April 1830, using 100 convicts in the hulk "Sophia",[12] and in April 1831 the Hobart Town Courier reported that it was "happy to see that great public work the New Wharf at the Battery already in active service.... vessel....is now taking on board the whole of her cargo of wheat for Mauritius at that station, thereby materially relieving the old landing place at Hunter's Island, now so crowded with the traffic of the numerous vessels in the harbour."[13] Before this, in November 1830, the whaler "Deveron" was able to come alongside a completed section of the wharf and discharge its oil in "one twentieth of the time that would have been needed under the old system."[14] It was not until May 1834, however, that the stone quay was completed to a point just east of Kelly's Steps, half way to the Point. After that, pile-driving to give the wharf a narrow timber facing began, with the solid rock bottom making the task a difficult one, and by 1836 a system for conveying fresh water directly into casks in the vessel's holds by means of a siphon pipe was installed.[15]

While the southern shore was the first of the Cove's margins to be extensively modified, the western waterfront had not been overlooked. Figure 8.5 incorporates a plan of 1828 (produced by the Engineer's Office) for development of the whole perimeter of the bay between Hunter's Island and the Mulgrave Battery. The western shore received most attention, as well it might, since the advantages accruing from its greater proximity to the town must have been clearly recognised. At the same time, any major development in the interests of commerce must have raised the problem of possible conflict with current administrative associations, though this was not the view of Gov. Wilmot who in 1846 described the area under reclamation as "waste and useless ground at the rear of Government House." He considered that the land formed would repay the Crown for the expenditure incurred.[16]

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12 Marine Board file, State Archives, Hobart (18)

13 The Hobart Town Courier, 9.4.1831.

14 A. Rowntree: Early growth of the port of Hobart Town, p. 98 (19)

15 Ibid., p. 99

16 Ibid.

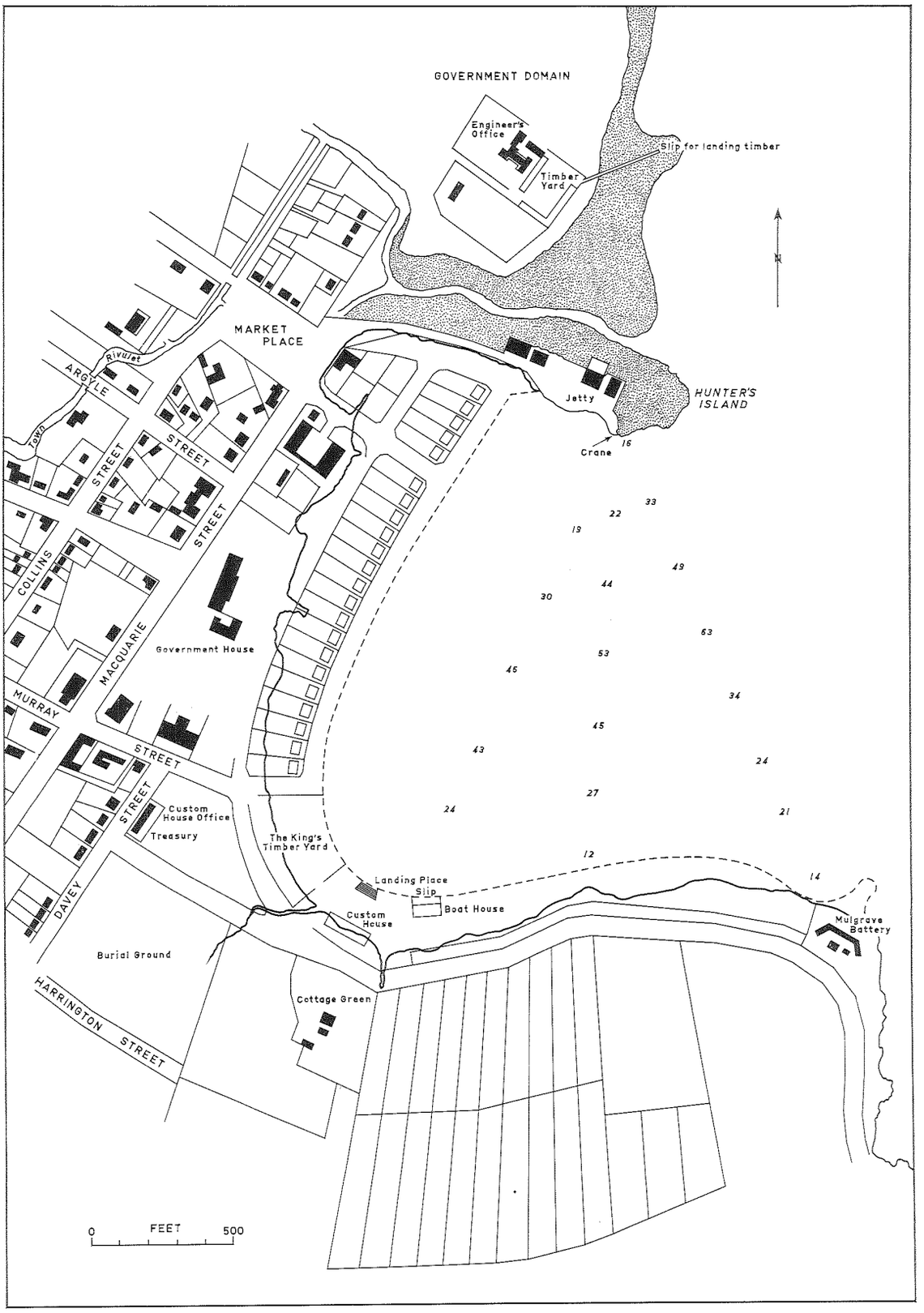

Fig. 8.5 Plan of the port and town in 1836, to which is added a port development proposal of 1828, one of several produced between 1828 and 1832. The proposal provides for reclamation of the western and southern shores, with a line of warehouses adjoining the town centre. Soundings in feet. The shoreline is unchanged from that of 1827 in Figure 8.3, but this is the only chart to indicate the extent of deposition from the Town and Domain Rivulets (GO/33/21, State Archives, and Hobart No. 9, Lands & Surveys Dept.).

The basis of the 1828 plan was the "allotments for merchants wharfs and warehouses," a homogeneous line of warehouses (22 in all) forward of the shoreline of 1826 (the same as that in Figure 8.3). They would have made an imposing facade behind marginal quays, but a less satisfactory base for pier development. In the southwest corner provision was made for a Custom House, near it a Careening or Heaving down Wharf, and nearer the battery a Custom House Quay. Behind them a long strip was to be reserved for Warehouses, Workshops, Sheds etc. Overall, this was a strongly mercantile scheme, reflecting the growing activity of the port and, perhaps, the increasing influence of the merchants. One feature clearly shown on this 1828 plan and reproduced in Figure 8.5, but not shown on other maps of the period, is the considerable deposition northward of the Hunter's Island causeway. In view of the removal of vegetation, the use of the rivulet for refuse, and the prevention of any southward dissemination of deposited material by the causeway, this is not an unexpected accumulation after 20 years' settlement.

Though a later production (the annotation reads 'In the Executive Council the 9th of July 1832'), Frankland's plan shown as Figure 8.6 seems less realistic if rather gracious. It appears that The Boulevarde surrounding the port margins would shield the town lands from waterfront activities, which were considerably more chaotic and less pristine than the neat and almost empty spaces (in the original as in the pale Figure 8.6 version) of the plan. From the Mole and Battery followed the Dock-Yard, then The King's Wharf (three vessels alongside) with a long dark space representing a 'line of sheds for sheltering goods on landing', then the arc-shaped Market Place blocked off by avenues of trees enclosing a Promenade, and finally, a little closer to the Hunter's Island end, the Hay and Wood Market. The possible uses of the remaining substantial stretch of quay leading northward to a canal arm of the harbour (which ran picturesquely to the doors of the Treasury building) were not designated.

The rapid increase of shipping through the 1830s (Table 8B)

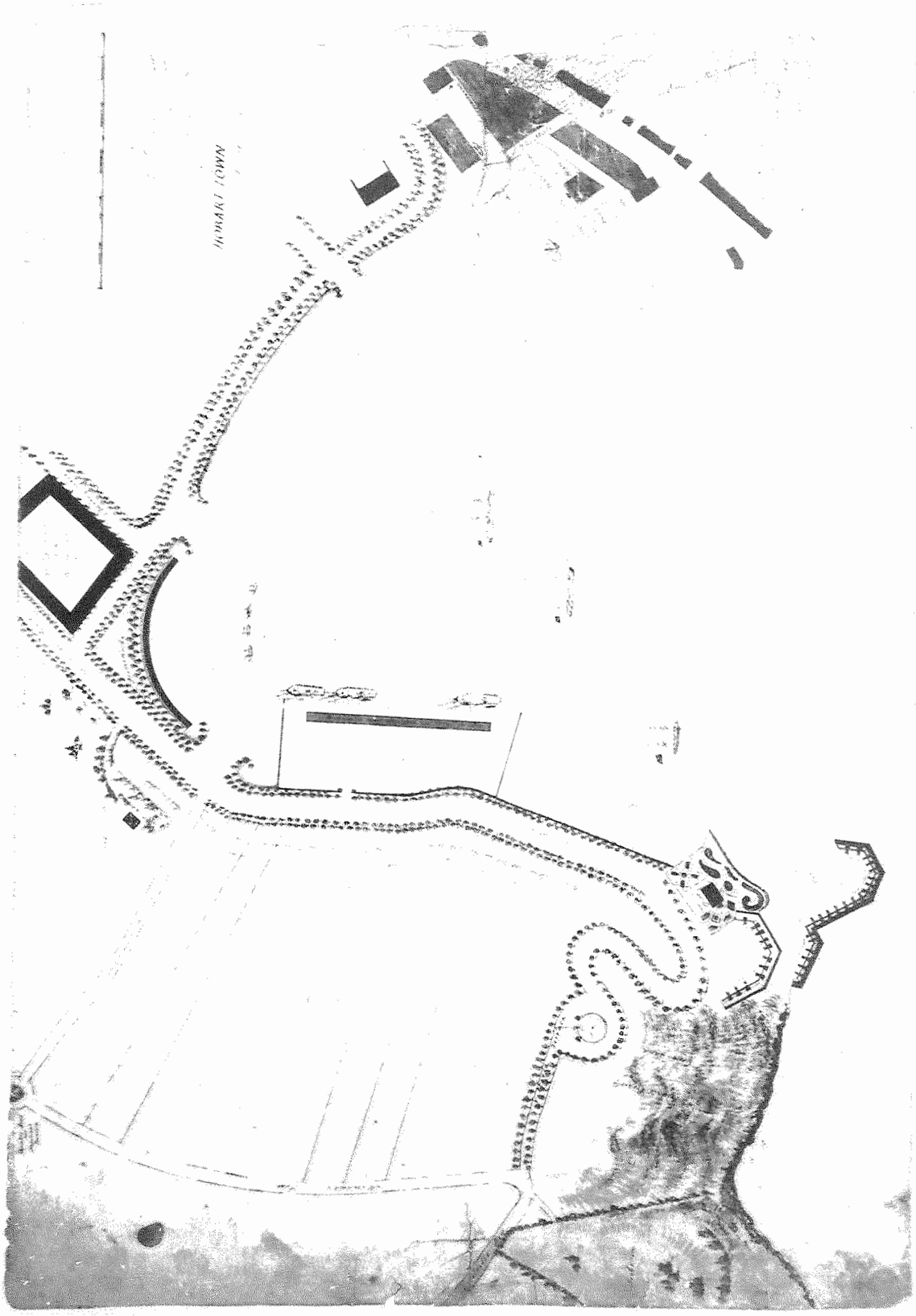

Fig. 8.6 Frankland's 1832 plan for development of the port environs, with a boulevarde dividing military, dockyard and market areas from the settlement proper (Hobart No. 110, Lands & Surveys Dept.).

underlined the need for expanded facilities, and the improvement

Table 8B

Shipping Arrivals at Hobart 1831-1840

Year	No.	Tonnage	Tonnage per Ship	Year	No.	Tonnage	Tonnage per Ship
1831	73	18,324	255	1836	187	45,057	241
1832	85	22,698	267	1837	129	28,377	220
1833	115	29,405	256	1838	186	43,882	238
1834	188	37,790	201	1839	207	45,764	221
1835	229	51,258	224	1840	217	44,471	205

Source: Compilation of shipping arrivals 1803-56

of the western shore began in 1839, continuing through the regimes of Governors Wilmot and Denison, with only one break for reasons of financial difficulty, in 1843-44. This was a large work of reclamation in which the forward line of the formed land was called Franklin Wharf. Squares of timber, rock and rubble were formed, then filled with spoil to force the water out through openings retained for the purpose.[17] To connect the area with the commercial centre which it was to serve, street extensions were necessary. Murray Street could fairly easily be continued to the waterfront, and Argyle Street was also simple, but any extension of Elizabeth Street involved the removal of Government House. As this had been contemplated and work even begun on the alternative Domain site in the 'twenties, the plan of 1839 reproduced as Figure 8.7 did not represent any startling policy innovation. It was not implemented quite as it appears, since Davey Street was carried right across, and the Argyle-Pedder interstices seaward of the (Commissariat) building became Constitution Dock; but the main lines of intent were there. The reservation of two dock areas, as mentioned in Chapter 4, was the main practical modification to development plans such as those of Figures 8.5 and 8.6.

Although 200 or so ships per annum does not seem a striking amount of traffic, by some standards -- the daily rate may approach this level in some of the world's largest ports -- the increase in shipping

17 Hobart Town Courier, 24.11.1840

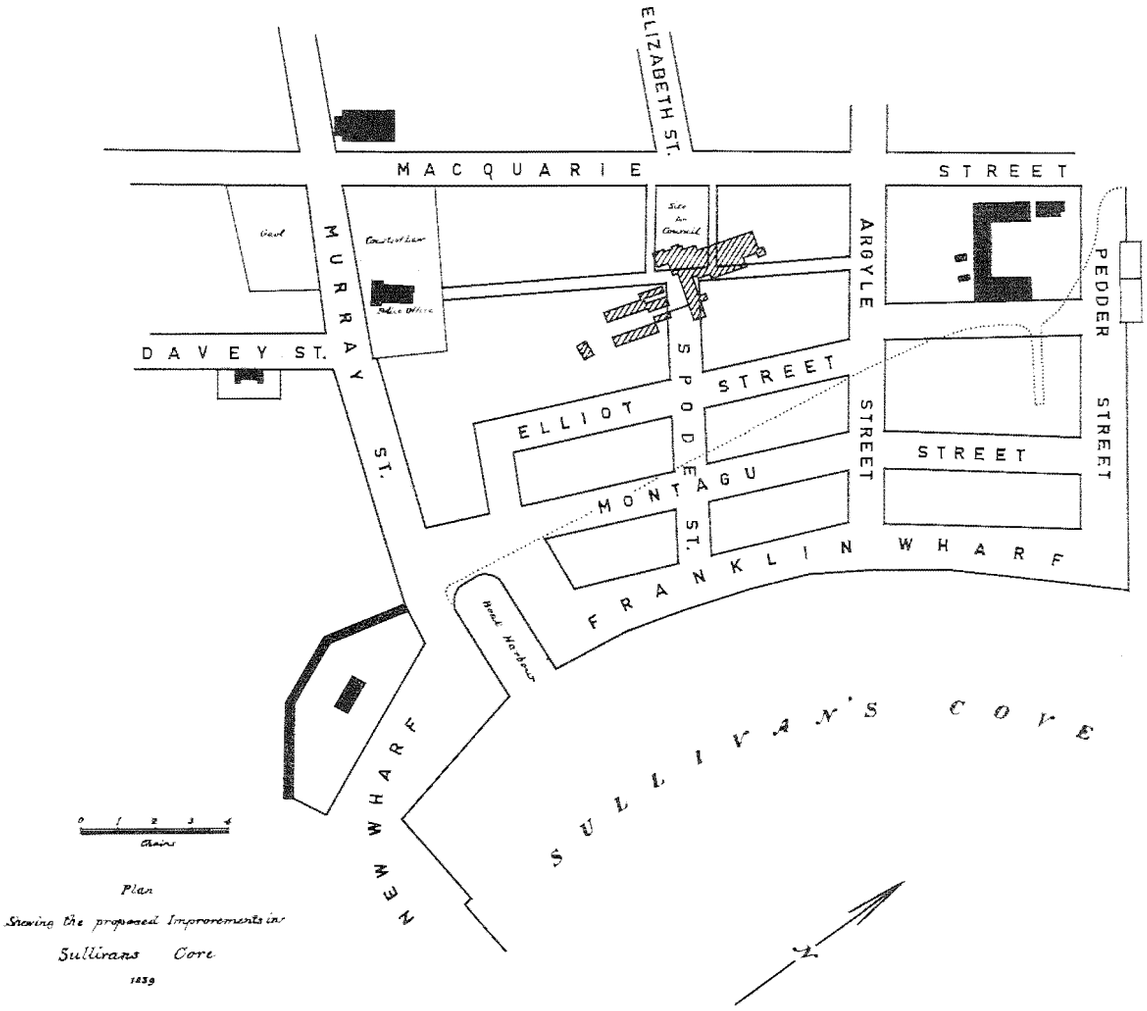

Fig. 8.7 Plan of 1839 showing a proposed street pattern for land to be reclaimed from Sullivan Cove. The Council site did not eventuate as Elizabeth Street was continued to Franklin Wharf (Hobart No. 20, Lands & Surveys Dept.).

from less than 100 annual arrivals through the 'twenties to more than 200 in the mid-'thirties had profound implications for a small port. With completely manual handling of cargo and a considerable need for provisioning after voyages lasting many weeks and even months, the turn-around of ships was slow. Every day spent in port doubles the pressure on berth or harbour space, so that 200 ships each tied up for two weeks would represent 2800 shipping spaces to be found in a year. Otherwise stated, there was probably an average daily accommodation requirement for about seven or eight ships in the Sullivan Cove of 1835, rising to 15 or so in 1841 when the annual arrivals jumped to 399. This number dropped in the mid-'forties, but then rose constantly from 367 in 1847. This means that plans and engravings such as Figure 8.8, showing the Cove much more liberally stacked with shipping than in earlier decades (Figure 8.9), were less dependent upon artistic license than might be supposed.

External Relationships

The early links of the Hobart settlement with the N.S.W. colony and with Britain have been well established, but it is appropriate at this point to examine the nature of the connections more closely. In 1804 12 of the 16 ships calling at the new colony on the Derwent were from Sydney, three were from Port Phillip and one from Boston. Of 80 vessels arriving in the first five years of port operation 75 had their trip origin recorded and 52 of these (69 percent) were from Sydney. Norfolk Island, Calcutta, China, the Cape of Good Hope, and the South Seas accounted for most of the remainder. The pattern did not change appreciably in the second five years of the initial period of trade restriction, with Sydney holding a monopoly connection broken only by a handful of voyages from India and Norfolk Island. Only two vessels arrived direct from Britain, most calling -- as Collins had complained-- at Sydney first and then re-embarking for V.D.L.

The lifting of the trade embargo in 1813 produced no immediate change in the pattern of oversea relationships. In 1817, the first year in which the number of ships entering the port exceeded one

Fig. 8.8 The port laden with shipping in 1840, viewed northward from Battery Point (Drawing by Le Breton on D'Urville's second visit; original in the Allport Collection).

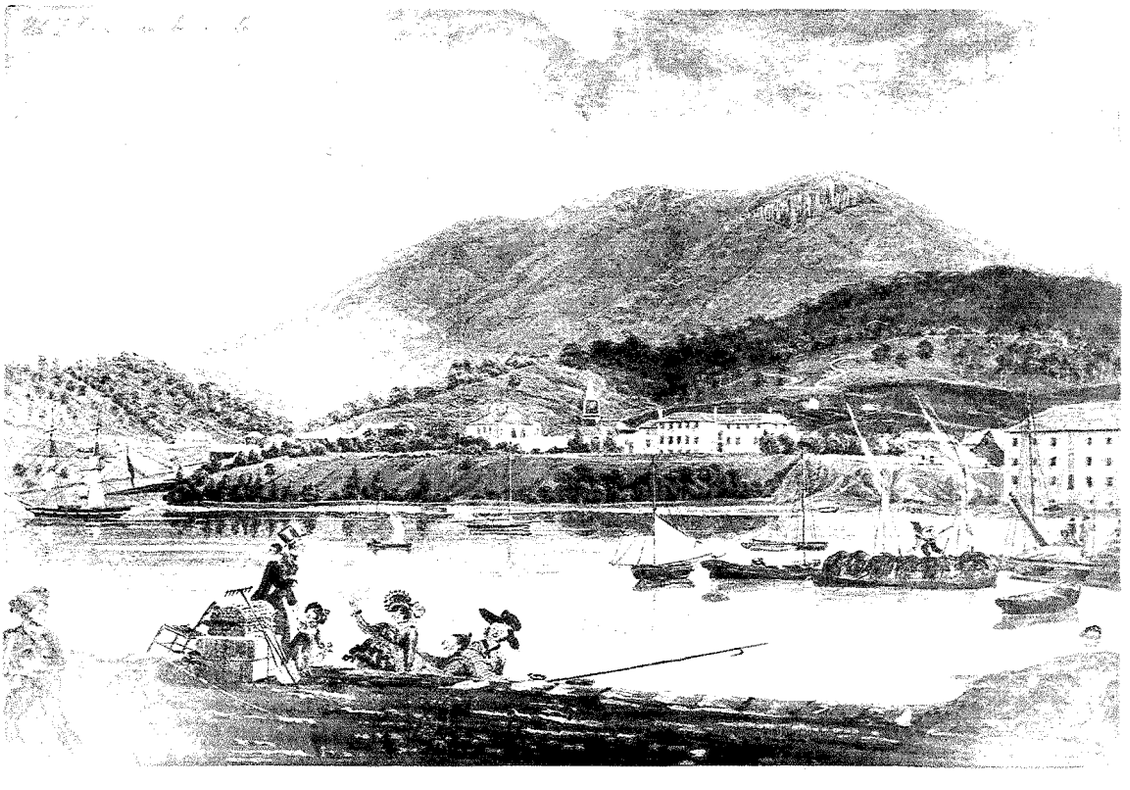

Fig. 8.9 Gentle port activity circa 1825. Goods transfer is associated with the Hunter's Island jetty at right. In the foreground an immigrant family appears to be landing its belongings. St. David's Church and Government House stand above the western shore in the centre (Tasmanian Museum print of Watercolour original in Allport Collection).

score, the position of Sydney was still a dominant 50 percent of the 26 out of 28 arrivals whose previous port was recorded, but Indian ports, France, and Mauritius, as well as two direct English sailings, now filled an increased proportion of total trip connections. Progressively the direct England-Hobart route became more important, so that in 1820 England accounted for 13 out of 37 recorded origins compared with 16 for Sydney, and by 1822, when the settlement had by fairly general consensus entered upon urban status, English ports had embarked 24 direct sailings (with two others from Scotland) while the Sydney sailings were 18. The data for the period before 1835 are summarised in Table 8C by three-yearly intervals.

Table 8C

Origin of Ships Arriving at Hobart 1804-1834

Year	Percent of total known	Distribution of all known previous ports (percent)					
		N.S.W.	Other Aust.	G.B.	Asia	Pacific	Other
1804	56	75.0	18.7	-	-	-	6.3
1807	100	46.2	7.7	-	7.7	23.1	15.4
1810	100	88.9	-	11.1	-	-	-
1813	100	71.4	-	-	-	28.6	-
1816	74	71.4	14.3	-	7.1	-	7.1
1819	82	37.0	22.2	14.8	14.8	-	11.1
1822	97	31.6	3.5	45.6	7.0	10.5	1.7
1825	100	26.9	32.1	20.5	3.8	-	16.7
1828	99	26.9	12.8	35.9	6.4	-	18.0
1831	100	23.3	15.1	41.0	8.2	1.4	11.0
1834	100	24.6	23.0	27.2	4.7	5.8	14.7

Source: Compilation of shipping arrivals 1803-56 and Records of Ships entered in and cleared out at Hobart Town 1824-30, State Archives.

The Sydney connection declined even further through the 'twenties and into the 'thirties, and it was the advent of other N.S.W. ports, notably the Twofold Bay whaling station, that produced the slight upturn for N.S.W. in 1834 (Table 8B). The 'Other Australia' column includes calls at V.D.L. ports, notably Port Dalrymple, Launceston and George Town, but while these accounted for much of the high proportion in 1819, the Macquarie Harbour convict station on the west

coast and the secondary punishment settlement of Maria Island off the east coast contributed to the even higher share of the 1825 total traffic. By 1830 Swan River had entered the lists, following the founding of the Western Australian colony in the previous year. It is clear that, as with other ports such as the Cape and Sydney, ships reaching Hobart from the Swan River had more often than not begun their total voyage in Britain. Thus in 1830 we find Dublin-Swan River-Hobart the route recorded for a 268-tonner, and in 1831 London-Swan River-Hobart is shown for a ship of 312 tons. Mostly, however, the record lists the previous port only. By 1834 King George's Sound (Albany) was added as a second western port of call, while Flinders Island and Port Arthur became regular features of the more local traffic. As with the Australian ports, links with New Zealand from 1830 reflected the development of settlement there, and New Zealand ports replaced the South Seas (whaling) and Norfolk Island as the main component of Pacific-origin traffic.

There was greater consistency in the links with established areas. In the early years ships from British ports mostly recorded 'England', occasionally 'London', although they certainly embarked from other points: Collins from Spithead, for example. Leith was specified as early as 1820, and then, as traffic increased rapidly, Dublin, Cork, Liverpool, Portsmouth, Ramsgate, Falmouth, Cowes and Dover all made their appearance in the space of six years. Plymouth, Greenock, Glasgow and Land's End were added before 1830, though London continued to outweigh them all, not least perhaps as the major supplier of convicts for transportation to V.D.L. Other major regions of the world were in much less frequent connection, even in this limited sense of shipping movement. Calcutta was established as a consistent foreland of Hobart's from 1805, and Mauritius was the most consistent trade link outside Britain from 1817. Calls were hardly frequent, but the connection was sustained: for example three ships from Mauritius, Isle of France or Port Louis (the alternative listings) in 1823, three in 1826, seven in 1830, 15 among a much heavier traffic in 1834.

Except for a few years in the early decades of settlement when the British foreland was dominant overall, Australian ports have provided more numerous direct shipping links than any others. Given the circumstances of foundation and the special relationships with the N.S.W. colony and with England, this is not unexpected. It is possibly more striking, and a reflection of the youthful state of Australian settlement, that an area of origin more than 10,000 miles away should in any year of the 'twenties or 'thirties outweigh Australian points of last embarkation of ships entering the port of Hobart. After that time, as not only Hobart but the later-established mainland seaports (20) grew apace, interstate connections became too numerous and the Melbourne link too strong for there to be any possibility of British ports maintaining such an importance from a uniquely distant location. The record of ports of registry of the ships arriving at Hobart substantiates the pattern of the previous port data. In 1827, a sample year, 46.2 percent of the ships had British registry, 37.5 percent Australian, 7.5 percent Asian and 2.5 percent American; a similar distribution to that for 1835 shown in Table 4C. It now remains to examine, as far as the evidence permits, the nature of the goods exchanged between the evolving town and its widespread oversea connections.

Commodity Flow Characteristics

In 1827 the most frequent foreland-cargo combinations of ships reaching Hobart were those in Table 8D below. As with Table 4E this has the limitation of being based on a shipment count rather than

Table 8D

Commodity-Origin Rankings of 1827 Imports

Port or Area of Origin	Commodity	% of shipments
Britain	General Cargo	22
Sydney	General Cargo	18
London	Convicts	10
Mauritius	Sugar & Wine	7

Source: Records of ships entered in and cleared out at Hobart Town 1824-30, State Archives.

actual quantities, but the data are at least indicative of the leading cargo movements of the time. Excluding the human cargo, 92 percent of all shipments introduced in 1827 were either of foodstuffs or general cargo. The ascendancy of Sydney and London are self-evident. As traffic and traffic connections increased in the 1830s and as the demands of the people diversified, through the government agencies and merchants, the commodity-origin associations became individually less dominant. The movement of sheep and cattle from southern N.S.W. through Twofold Bay, for example, lessened the relative strength of the Sydney connection.

Although the net widened with the consolidation of settlement and the evolution of Hobart Town, the main lines of trade for the first half of the century were, as Hartwell observed, laid down by 1820. A contemporary report which he quotes[18] summarises the position:-

> "The settlement on the Derwent has considerable intercourse with India, from whence the supplies of exotic produce are principally drawn: tea, coffee, sugar, spirits, soap, cloths, linen, etc. European and colonial articles are also occasionally imported from the Isle of France and Batavia. Supplies of English goods, independent of vessels consigned to established merchants, have been generally brought out in convict transports. As yet there are no staple articles of export, but several hold out favourable prospects. The Derwent offers a station for certain success in the whale fishery, the oil being an article of sure market in India. Wool, which is now produced at Port Jackson equal at least to the Spanish, sells to great advantage at home, may be carried to as high perfection in Van Diemen's Land. Grain, which is now raised in quantities considerably exceeding the demands of the settlement, has hitherto found a market as to the surplus at Port Jackson, and it may be hoped that the establishment of distilleries, before the redundancy shall too much increase, may render the internal demand certain."[19]

A selection of individual shipping cycles, taking every tenth entry (22) for each year 1816-1823, is shown in Table 8E. While some types of cargo are inevitably passed over (wheat, salt, seal skins, female prisoners, Governor Macquarie, horses, troops) the range of incoming goods and ports of origin and destination is generally well represented. The importance of the British and N.S.W. connections

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18 R.M. Hartwell: The Economic Development of VDL 1820-1850, p. 162 (21)

19 The Asiatic Journal, September 1820, p. 218

is further reinforced, some transhipment is suggested (teas and prisoners from Sydney), fishing (probably whaling) and sealing are included, and a voyage of discovery as well as trade

Table 8.E

Selected Trade Movements June 1816 - December 1823

Year	Cargo	From	To
1816	merchandise	England	Pt. Dalrymple
1817	merchandise	Batavia	Sydney
	Huon pine	Gordon R.	Kangaroo I.
1818	merchandise	Sydney	Pt. Dalrymple
	to refit	Sydney	Mauritius
1819	merchandise & passengers	England	Sydney
	merchandise	Mauritius	Sydney
	Sundries	England	Sydney
1820	passengers	England	Sydney
	teas	Sydney	Sydney
	fishing here	New Zealand	England
	passengers	Leith	Sydney
1821	prisoners	England	Sydney
	Ballast	Macquarie I.	Hunter's I.
	passengers	England	Sydney
	passengers	England	Sydney
	merchandise	Calcutta	England
1822	passengers	England	Sydney
	cedar	Sydney	Sydney
	spirits	Hunter's I.	Sydney
	sugar	Mauritius	Sydney
	prisoners	Sydney	England
	passengers	England	Sydney
1823	passengers	England	Sydney
	prisoners	England	Sydney
	coals	Sydney	Mauritius
	discovery	Russia	on discovery
	elephant [seal] oil	Macquarie I.	Sydney
	passengers	England	Sydney

Source: Andrew Bent's Almanack 1824-29, p. 69 ff.

in local products (coal and cedar from Sydney, pine from western VDL) indicates the variety of these early shipping movements.

Trade was heavily one way during Collins' foundation years, but gradually primary produce began to flow to N.S.W. to offset part of the expense of maintaining the colony. The first V.D.L. wool was reported in 1819, having been accepted by a ship's captain as payment for merchandise. Its inauspicious reception in London and its local use as mattress filling belied its imminent success.[20] Whale and seal oil were early obtained from the South Sea fisheries, and bay whaling in and around the Derwent estuary resulted in "heaps of bone....on the eastern shore".[21] Evans recorded an item in the Sydney Gazette reporting the shipment in June 1818 of 1200 sheep and 12 cows from Hobart Town to Mauritius, and also wrote that "exports.... on several of which the parent colony has a great dependence, consist generally of cattle, sheep, wool, flour, corned meats, hams, tongues, dried fish, hides, tallow, barilla, bark for tanning in abundance, seal-skins, whale-oil, and spars."[22] The particular dependence of N.S.W. on V.D.L. corn was mentioned and southern potatoes were also in demand at Port Jackson. Hats were being made there from seal-skins shipped from Hobart, and a few years later Betsey Island at the Derwent mouth was reported completely stocked with silver-haired rabbits, whose skins were exported from Hobart Town to China.[23]

Various of the early colonial products were subjected to duty or restriction at one time or another, and historians such as West have traced the vagaries of the British market. As far as the effects of such regulations on the outward flow of goods is concerned the lack of consistent quantitative measures of commodity flow makes their pursuit unrewarding from a geographical standpoint. We are therefore in this respect confined to the knowledge that in 1829 hides brought 5d and 6d per lb in London and paid duty of 1s. 2d. to 2s. 4d. per cwt; that wool was received duty-free but London merchants

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20 J. West: The History of Tasmania, Vol. 1, p. 73 (23)

21 Ibid., p. 74

22 G.W. Evans: .... Description of VDL, pp. 90-1 (24)

23 J. Ross: Hobart Town Almanack, 1829, p. 77 (25)

remarked on the room for improvement in its cleaning and packing; that oil imported in British vessels carried duty of 1s. per ton as against £26/12/0 levied on American oil; that much leather was exported to Sydney and some soap to England; that bark brought £11 per ton in England in 1828 and was duty-free until 1833; and that wheat was "frequently exported to Sydney, and in good seasons to the Isle of France, Rio de Janeiro, and the Cape of Good Hope."[24]

The total result for the port of Hobart during its early evolution was, despite fluctuations in trade and traffic (neither of which are constants in any event), a general growth in activities of external commerce and the development of port facilities to accommodate the increase. Tables 8.A, 8.B and 4.A indicate the extent of traffic growth from 16 ships of less than 2000 tons total in 1804 to 43 of perhaps 5,000 tons in 1820, and 399 of about 77,000 tons in 1841. A comparison of Figures 8.8 and 8.9 shows something of the changing scene between 1825 and 1840.

Commodity Values

At one or two points of time records of the relative importance of the various commodities involved in the colony's expenditure or income are available. Thus in Table 8.F, for a year in 1828/29, we find the more important commodities by value differing not greatly in kind from those of 1847 in Table 4.G, although the large proportion of total value in unspecified items somewhat reduces the worth of the record. However, the complete identification of the specified export commodities with primary production is notable, as is the high concentration of import values in clothing, hardware and liquor of various kinds. In the 'forties Launceston, benefiting from the rise of Melbourne, began to challenge Hobart's port supremacy, but during the period covered by Table 8.F Customs receipts at Hobart were £32,029

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24 Ibid., pp. 141-6

Table 8.F

Value of Exports and Imports at Hobart Town 30/9/1828 - 30/9/1829

Exports		Imports	
Commodity	Value (nearest £)	Commodity	Value (nearest £)
Wood	27,140	Piece goods	21,485
Oil	8,336	Hardware	21,460
Wheat	4,119	Rum	15,505
Whalebone	3,407	Malt Liquor	14,181
Potatoes	2,951	Wine	12,484
Livestock	2,421	Tea	11,414
Flour	2,370	Sugar	11,201
Bark	1,294	Woollens	10,698
Hides	553	Brandy	8,337
Seal skins	415	Tobacco	4,534
Kangaroo skins	252	Hosiery	3,708
Barley, oats	88	Gin	2,300
Not enumerated	47,022	Not enumerated	121,859
Total	101,069	Total	259,185

Source: Ross's Almanack 1830, pp. 268-9

in contrast to Launceston's £9,933, and 14 vessels belonged to the former port as against 4 to the latter.[25]

In his 1831 Almanac Ross attributed the rise in value of exports from two-fifths of imports to more than half (£170,000 compared with £300,000) to "the late success of wool ... in the London market, the continued draft which Sydney has required of wheat... the several cargoes which have gone to the new settlement of Swan River...."[26] In 1834 £246,000 out of £355,000 worth of imports into Hobart Town were from Britain, and N.S.W. was a poor but clear second with £68,000 worth. Exports were even more heavily British-oriented: £97,000 worth to Britain, £15,000 for N.S.W.[27] To

25 J. Ross: Hobart Town Almanack, 1830, p. 269

26 Ibid., 1831, p. 277

27 Ibid., 1835, p. 49

follow the development of shipping and commodity movements into the 'forties selections of arrivals and departures for 1837 and 1846 are compared (Table 8.G).[28] No considerable change from the

Table 8.G

Selected Trade Movements 1837 and 1846

Year	Ship Tonnage	Cargo	From	To
Arrivals 1837	-	General	London	Sydney
	-	prisoners	Portsmouth	Sydney
	-	[sheep & cattle]	Twofold Bay	Twofold Bay
	-	[sugar]	Mauritius	Sydney
	-	general	London	London
	-	?	Port Phillip	Port Phillip
Arrivals 1846	394	general	Falmouth	Hobart
	602	stores & prisoners	Portsmouth	"
	390	general	London	"
	157	general	Calcutta	"
	358	oil	New York	"
	335	oil & bone	Fairhaven	"
	157	rice etc.	Madras	"
Departures 1846	326	general	Hobart	London
	502	troops	"	Sydney
	300	stores	"	South Seas
	252	stores	"	South Seas
	383	general	"	Sydney
	1175	troops	"	Sydney
	337	general	"	South Seas

Source: Elliston's Almanack 1838, p. 165 ff. (26), and Wood's VDL Kalendar 1847, pp. 133-7 (27)

patterns already established is exhibited; staple commodities, including convicts, continued to dominate the exchange process, though it should be remembered that 'general cargo' can cover a multitude of individual non-bulk items.

The relative importance of individual exports and imports is only occasionally available for particular ports, and Table 8.H gives

28 The 1837 record lists the cargo intermittently, so entries representing the main trends have been chosen. The 1846 listings are divided into arrivals and departures and into British and other sailings, and every tenth entry from these groups has been taken.

a break-down of exports to Britain from Hobart and Launceston from December 1844 to December 1845, at which time total ship arrivals at Hobart were climbing through the mid-200s toward 400 by the end of the decade after the slump to 151 in 1843. The exports itemised were shipped in 11 vessels of 4146 tons total from Hobart

Table 8.H

Value of British Exports from Hobart and Launceston

1/12/1844 - 1/12/1845

Commodity	From Hobart (£)	From Launceston (£)	Total
Wool	95,092	106,110	201,202
Oil	35,125	2,047	37,172
Wheat	3,254	10,880	14,134
Whalebone	9,591	1,040	10,631
Hides & leather	1,296	2,110	3,406
Tallow	1,634	907	2,541
Bark	358	1,112	1,470
Timber	-	597	597
Total	146,350	124,803	271,153

Source: Wood's VDL Kalendar 1846, pp. 33-4

and 11 of 3,933 tons from Launceston, reflecting the now reduced inflow of direct British traffic and also the tendency for more than half of the British arrivals to move on to another of the Australasian colonies rather than returning directly to Britain. Thus in 1846 there were 32 arrivals from British ports at Hobart but only ten departures, all for London. The table also shows the increased importance of Launceston at this time, with 46 percent of the value of goods exported to Britain, stemming almost entirely from the strong position of the northern midlands wool industry. The operators of this basic sector of the economy were already vying with the merchants of Hobart for the rôle of the most influential group among the growing population of the island.

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Chapter 9

Population, Society and Administration

On 26 February, 1804 the colonists victualled from H.M.'s stores at Sullivan Cove, Derwent River were as follows.

Table 9.A

People Victualled At Sullivan Cove, 26 February, 1804

Qualities	Men at full allowance	Women at 2/3ds allowance	Children		
			at 2/3ds	at 1/2	at 1/4
Military establishment	26	1	-	-	-
Civil	6	-	-	-	-
Settlers	13	5	8	2	3
Convicts	178	9	2	-	6
*Supernumeraries	3	-	-	-	-
Total	226	15	10	2	9

*Mr. Brown, Botanist; Henry Hacking; Salamander, a Port Jackson native.

Source: Collins to King, 29.2.1804, CO 201/35 Public Record Office, London, p. 84. Also in J.B. Walker: Early Tasmania, p. 66, the same, except that the children are shown by age as over 10, over 5, and under 5.

Once the settlers were removed to New Town Bay Governor Collins was left with a work force of 178 male convicts, many of whom were old or useless. With the arrival of the remainder of his original English party in June[1] from Port Phillip, the strength of the establishment was brought up to 433, their composition being as in Table 9.B. With 65 percent of the total strength prisoners, we are left in no doubt as to the overall character of the population set down to fashion a settlement from an almost entirely

1 Walker, using mainly Colonial Office sources, reports a violent voyage of 33 days to reach the river on June 22, then three more days to come up river (p. 79). Collins to Hobart, 31.7.1804, CO 201/35, p. 146 states that the voyage took 32 days from Port Phillip, the "Ocean" arriving Sullivan Cove on June 25. In any event it must have been one of the slowest Melbourne-Hobart sailings ever.

Table 9.B

Inhabitants in HM's Settlement, Derwent River,

V.D.L., July 1804

Category	Total A*	Men	Women	Children	Total B*
Civil department	33	18	5	9	32
Military -do-	60	48	9	3	60
Settlers	36	13	7	16	36
Prisoners	281	279	2	-	281
Prisoners' wives & children	26	-	16	8	24
Total	436	358	39	36	433

* Although Collins' numbers (Total A) add up to 436 his statement includes the observation "Total number victualled from the stores and number in the colony -- 433". Walker does not give the precise source of his more detailed record, but believes (footnote p. 80) that the few prisoners from Risdon who were to stay on were included. HRA (Series 3, Vol. 1, p. 258) shows that the Judge Advocate was on leave, and a blank was left for one age group of children -- there may have been two.

Source: Collins to Hobart, 3.8.1804, CO 201/35, Public Record Office, London, p. 157, and J.B. Walker: Early Tasmania, p. 82.

natural environment,[2] substantially dependent for their continued existence on the lines of maritime supply examined in Chapter 8. The development of the population in its first 40 years was as much a matter of the trend to normalcy of composition as of total growth to urban dimensions.

From the beginning, and particularly then, convict labour (in various categories) was an important developmental agent. Some indication of the prisoners' early contribution was given in

2 The modification of the environment by the small aboriginal population appears to have been minimal since they had "no idea of cultivation or maintaining domesticated animals." One of the problems of historical geography is to decide where to begin the analysis, but in this case there can be no dispute that the evolution of urban Hobart owes nothing to pre-European settlement. Nevertheless, conflcit with the aborigines was one reason for abandoning the Risdon site, and the history of the aborigine's decline is a fascinating if dismal one. The quotation above comes from the very brief summary of W. Bryden and W.F. Ellis in the Atlas of Tasmania (3). G.A. Robinson's Friendly Mission (4) is the most comprehensive account.

Chapter 6, and it is clear that the clearing, fencing and tilling of land and the construction of buildings between the Hobart Rivulet and the Cove were their doing. Thirty four of the 279 male prisoners of July 1804 were assisting the 36 free settlers establish themselves at Farm (New Town) Bay (Table 9.C).

Table 9.C

Employment of Male Prisoners, July 1804

Occupation	Hobart Town	Farm Bay	Total
Agriculture & stock	5	30	35
Buildings	76	-	76
Boat building	4	-	4
Various employments	117	1	118
Servants	29	3	32
Sick & convalescent	14	-	14
Total	245	34	279

Source: Collins to Hobart, 3.8.1804, CO 201/35, Public Record Office, London, p. 158.

The large proportion engaged in building is notable, 50 of the 76 being involved in preparing, carrying and erecting timber. More detailed versions[3] of Table 9.C also show that 38 of the variously employed category were in the Town Gang and 21 formed boats' crews. The remaining half were distributed among 14 occupations, the most strongly represented being overseers, the night watch and the Government gardens, with seven each -- all service functions. One printer, one tanner, four cooks, bakers and drummers, and 11 tailors, shoemakers and thatchers-tool helvers were the sum total of tradesmen to whom the settlement looked for its non-building skills. Two-thirds of the servants were in the employ of the commissioned civil and military officers.

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3 J.B. Walker: Early Tasmania, p. 34 and HRA, Series 3, Vol. 1, p. 258.

There was no quick influx of population after Collins' party had united, and on February 28, 1805, just a year after the first muster, 470 persons were being victualled. The main increase was in the prisoner group of 309, which now included 35 women. Employment of the 274 male prisoners had varied mainly in the reduction of the miscellaneous group to 97 and the strengthening of the agricultural force to 46, of whom 37 were at New Town.[4] Not until the advent of the Norfolk Island evacuees in 1808 did the number of "settlers" grow appreciably. Collins reported 482 victualled at 17.12.1805,[5] and in June of the following year when he was complaining of a year's scanty provisioning and the lack of official confirmation of his settlement site, death had outstripped natural increase and immigration to reduce to 465 the people victualled from stores and to 475 the total in the colony, 290 being prisoners.[6] The arrival of 554 Norfolk Islanders between November 28, 1807 and October 2, 1808[7] achieved the distinction of raising the population to more than 1,000, but the influx "necessarily increased the prevailing distress at Hobart"[8] resulting from inadequate food supplies.

Consolidation in the 'Twenties

A gradual build-up of settlers and convicts and of those who administered both brought the population through less straitened times to a supposed 2,700 in 1821, and that of the whole island to 7,285, of whom 5,000 were males.[9] Most of this increase occurred in the latter part of the 14 years between the administrations of Collins and Arthur. The inter-regnum between Collins' death in 1810 and Davey's arrival in 1813 was not a time of progress for the settlement. Lieut. Lord was commandant for less than four

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4 Collins to Hobart, CO 201/43, pp. 24-5

5 Collins to Camden, 17.12.1805, CO 201/43, p. 116

6 Collins to Castlereagh, 2.8.1806, CO 201/43, p. 134

7 Collins to Castlereath, 10.5.1809, CO 201/52, p. 22

8 J.B. Walker: Early Tasmania, p. 171

9 W. Wentworth: A Statistical Account of the British Settlements in Australasia, vol. 2, pp. 7 & 328 (5). For higher and more reliable figures see Table 9.D below.

months, Capt. Murray was corrupt, and Major Geils' added rank added nothing to the quality of his tenure, from February 1812 to February 1813. Under Geils "no progress was made....the public buildings were neglected, and their construction prevented by the misappropriation of materials by Geils."[10] Governor Davey was quite unsuitable as an administrator and any capacity he might have had to advance the colony was limited by the restrictions that Macquarie placed upon his discretionary powers in authorising payments, entering into contracts and the like. Although the first convict ship from England to V.D.L. arrived in October 1812 Macquarie's demanding public works policy in N.S.W. absorbed most of the flow from Britain: during the three years 1814-16 only 238 male convicts were sent by him to V.D.L. and they were among the worst types.[11] It was not until Sorell's administration in 1817 that conditions became generally more auspicious for the increase of population and the economy.

The timing is substantiated by Table 9.D, which presents a less detailed analysis than the official muster records. The people designated 'freed' in October 1820 comprised 487 free by virtue of a pardon or the expiry of sentence and 186 'conditionally emancipated.' Only 791 or 19.8 percent of the total were children owing to the predominance of unmarried military and convict populations.[12] An estimated town (without environs) population of 3500-odd is feasible, for in October 1820 there were 594 houses in Hobart Town[13] and the occupancy rate is unlikely to have been less than six people per house. Also, Sorell mentions the addition of 1600 to the V.D.L. population between the 1819 muster and January 1821[14], so the elevation of the Hobart total from 2,500-3,000 to about 3,500 in eight months would have been possible.

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10 Historical Records of Australia, Series 3, 2, pp. ix-x (6)

11 Ibid., p. xiv

12 Cf. One-sixth of the N.S.W. population were children 15 years after foundation. See Walsh: The English colony in N.S.W., p. 165 (7)

13 HRA, 3, 4, p. 637. Sydney after 15 years had about 650 houses and 2,500 people according to Walsh (op. cit., p. 159)

14 Ibid., p. 634

Table 9.D

General Musters of Inhabitants at Hobart Town, 1814, 1815, 1820

Date	Civil	Military	Settlers and Free Landless	Male Prisoners	Female Prisoners, Wives & Children	Freed	Total Population
22.11.1814	42	128	899	302	73	-	1,444
30.10.1815	44	89	926	310	89	-	1,438
1.3.1820	430			959	188	329	1,906*
28.10.1820	1,230			1,769	330	673	4,002**

* There would seem to be an error or omission in the total of those who came free or were born in the colony (430); even if maintained at the 1815 level 600 would be added to the total. Alternatively the earlier populations may have included more settlers from the outer districts than are thought to have existed. The March 1820 figures are clearly for Hobart alone.

** This figure includes several districts surrounding the town: Argyle, Queenborough, Kingsborough, Glenorchy, Pitt I. In the return for March 1820 (HRA, 3, 4, p. 638) Queenborough and Kingborough (approx.) had 90 people, New Town and areas further north (approx. Glenorchy) had 281. It seems that the Hobart Town count for October 1820 was about 3,500. The V.D.L. population then was 10,009.

Source: HRA, 3, 2, p. 75; 3, 2, p. 137; 3, 4, p. 638; 3, 4, pp. 635-6

The free settler population for this period can be more closely analysed from the muster records (Table 9.E). The statistics are not completely consistent in that those for 1814 and 1816 relate to the proprietors of holdings, their families, and the convicts and freemen in their employ, while those for 1820 include categories of 'came free,' 'free by pardon', and 'conditionally emancipated'; and the convict element is not shown to have any employment relationship with the free and freed settlers. As in Table 9.D the October 1820 figures are for the Hobart Town district. Despite the unsatisfactory aspects of the data it is evident that the already low proportion of children indicative of the pioneer character of the 1810s free settlers was further reduced, from 42 to 36 percent, by the addition to the free population of mainly unmarried former prisoners.

Table 9.E

Composition of the Settler Population of Hobart 1814-1820

Date	Settlers' Families				Employed		Total
	M	F	Ch	Total	Freemen	Convicts	
22.11. 1814	262	157	312	731	37	63	831
21.11. 1816	244	158	300	702	28	45	775
28.10. 1820	768	448	687	1903	-	2099	4002

Source: HRA, 3, 2, p. 74; 3, 2, p. 601; 3, 4, pp. 635-6.

By the mid-'twenties when the Derwent settlement had begun both to look and function as a town the rate of population influx became substantial. In 1824 prisoners arrived on eight ships from England or Sydney and 21 carried passengers, mainly from England, adding together 654 migrants and 957 prisoners to the existing population. This rate was maintained through the decade, as indicated in Table 9.F, though by no means all the incomers remained in Hobart, whose inhabitants were recorded as numbering

Table 9.F

Arrivals of Passengers and Prisoners 1824-28

Year	Passengers	Prisoners
1824	654	957
1825	510	870
1826	?	602
1827	422	1,063
1828	?	1,085

Source: Bent's Almanack 1825, 1826, 1827, 1828 (8)

5,700 in 1828.[15] In 1830 the capital could count 6,000 heads or just under 30 percent of V.D.L.'s 21,000. The Richmond district of leading grain production provided 2,800 of the balance, followed

15 J. Ross: Hobart Town Almanack, 1829, p. 157 (9)

by Launceston's 2,500.[16] The composition of population in Hobart and its district was, in general, as shown in Table 9.G. The developing balance of the urban sector drew comment:

> "There is one remarkable feature of the inhabitants of the town, compared with the interior....the number of females, which a few years will probably at least in the towns equal that of the other sex, as far as the free population is concerned".[17]

Table 9.G

Population of Hobart Town and District 1830

Area	Free				Prisoners		Total
	Men	Women	Boys	Girls	Men	Women	
Hobart Town	1400	1100	600	400	1900	600	6,000
H.T.District	300	90	150	40	180	40	800

Source: Ross's Almanack 1831, p. 80 and J. Bischoff: Sketch of... V.D.L., p. 48 (10)

The author went on to assure that "as the census on which these numbers were founded was taken with great pains ... every dependence may be placed upon its correctness."

At this time, with the population at about 6,000 and the form of the town as shown in Figure 7.10, the settlement had existed for a quarter-century. While more people now lived outside the town and its north-of-the-island counterpart than in them, Hobart did not suffer the impediment of excessive dispersal that affected the early development of Dunedin (11). In fact its rate of population growth compared quite favourably with Sydney's, to the extent that the premier settlement had an eye on southern competition, and it lost little in comparison with thriving western American towns of the period. Thus Louisville, founded in 1778,[18] had reached a population of only 13,000 by about 1830;[19] Cincinnati took from 1788 to 1805 to acquire less than 2,000 people[20] and had

16 Ibid., 1831, p. 283

17 Ibid., p. 80

18 R.C. Wade: The Urban Frontier, p. 14 (12)

19 Ibid., p. 305

20 Ibid., p. 109

grown to about 22,000 by 1828;[21] and Pittsburgh climaed only 1,565 residents in 1800 (its first plan was laid out in 1764),[22] rising to 22,000 in about 1832.[23]

Rapid Growth in the 'Thirties

There is little doubt that Hobart achieved its most rapid rate of population increase in the 1830s, and during the decade improved its position relative to the growth of the whole V.D.L. population. Shipping arrivals more than doubled between 1832 and 1834 and trebled during 1831-35, with tonnage increases not far behind. The published reports of Evans and others, the success of V.D.L. wool and other colonial produce in London, the attraction of land grants, and the official encouragement of migration from England to V.D.L. contributed to the flow of people into Hobart and the interior. During 1832 2,131 emigrants arrived in the port of Hobart Town, with males still predominant but not excessively so: 936 males, 769 females, 426 children.[24] With this kind of influx the town's population grew rapidly to 8,360 by the end of 1831[25] and the district to 10,101 by December

Table 9.H

Population of Hobart Town District, December 1832

	Free		Convict		Total		Grand Total
	M	F	M	F	M	F	
No.	3850	2776	2699	776	6549	3552	10,101
%	38.1	27.5	26.7	7.7	64.8	35.2	100
Increase [1831-2]							
No.	748	549	337	107	1085	656	1,741
%	43.0	31.5	19.4	6.1	62.3	37.7	100

Source: Lieut. Breton: Excursions in NSW, Western Australia, and VDL, p. 327 (15)

21 Ibid., p. 221

22 Ibid., pp. 10-11 23 Ibid., p. 305

24 H. Melville: Van Diemen's Land Almanack, 1833, p. 256 (13)

25 Statistics of VDL, 1831 CSO 50 6, Access. 3329, pp. 126-7 (14)

Fig. 9.1 The old Treasury in Macquarie Street near the waterfront, at the foot of Market Place, c. 1837. The Ordnance Stores on New Wharf are seen beyond the corner of the Commissariat Store at right (Tasmanian Museum collection).

Fig. 9.2 The Bank of Van Diemen's Land in 1824. The building took a completely residential form, as have other bank premises since. (Tasmanian Museum collection)

1832 (Table 9.H). Breton (15) suggested a deduction of 500 would be sufficient allowance for the population outside the town and indicated further that the district contained 5,299 less people than the district of Sydney, but 6,774 less free people owing to there being nearly 1,500 more convicts in Hobart Town.[26] The increase in the table, though not specified, is that for the past year, being exactly the difference between 8,360 and 10,101. This order of growth did not go unremarked, as we have seen earlier (Chapter 7), and in recording specifically the town's population of 10,000 as "the total number of the inhabitants, including those of its immediate suburbs, and the prisoners and military" Melville added that "the suburbs of Hobart Town have latterly undergone a marked and very decided improvement",[27] giving more point to the symbols of development and of urbanism, such as the Treasury (Figure 9.1) and the Bank of V.D.L. (Figure 9.2), which were progressively filling the centre. Appropriate to the times, Government House (Figures 9.3 and 9.4), itself the subject of frequent additions, continued to occupy a dominant position which belied its structural instability.

Expansion continued apace. The V.D.L. total moved from 26,694 at the end of 1832 to 31,551 a year later. No less than 2,729 convicts arrived in 14 vessels during 1833, accounting for 56 percent of the increase. The Hobart Town district's population was now 12,261, or 39 percent of the whole.[28] These were almost certainly the largest absolute annual increases before the mid-century, and as relative increases they have not again been equalled. It was to take mining centres such as Ballarat and Bendigo in Victoria and Broken Hill in N.S.W. (16) to surpass a growth rate of 20 percent. The next few years were important contributors to growth, nevertheless, as Table 9.I illustrates. The outstanding feature was of course the

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26 Lieut. Breton: Excursions in N.S.W., Western Australia, and VDL, pp. 327-8

27 H. Melville: VDL Almanack, 1834, p. 4

28 J. Ross: Hobart Town Almanack 1834, pp. 42-3

Fig. 9.5 Government House from the Cove, 1833. This is a nearer and foreshortened view in the same direction as Figure 8.9, with St. David's Church close behind Govt. House and the Commissariat Stores right on the waterfront. Davey Street was to follow closely the top of the low cliff. (Drawing by Atkinson of "The Seat of His Excellency Lieutenant Governor Arthur", Sr. C. Craig's collection)

Fig. 9.4 Government House in 1836, eastern (harbour) elevation. (Tasmanian Museum collection)

Table 9.I

Population Growth Hobart and V.D.L. 1833-41

Date		Free		Convict		Total		Total Hobart	Total V.D.L.	Hobart % V.D.L.
		M	F	M	F	M	F			
Dec. 1833	No.	4860	3649	2882	870	7742	4519	12,261	31,551	38.9
	%	39.6	29.8	23.5	7.1	63.1	36.9	100		
1/1/1835	No.	5416	4439	2613	793	8029	5232	13,261	35,248	37.6
	%	40.8	33.5	19.7	6.0	60.5	39.5	100		
1/1/1836	No.	5545	4446	2952	883	8497	5329	13,826	37,869	36.5
	%	40.1	32.2	21.4	6.4	61.5	38.5	100		
1/1/1837	No.	6022	4506	3095	838	9117	5344	14,461	39,544*	36.6
	%	41.6	31.2	21.4	5.8	63.0	37.0	100		
1841	No.					7897	6705	14,602	50,216**	29.1
	%					54.1	45.9	100		

* Excludes military (about 1000)

** Probably excludes military

Source: Ross's Almanack 1834, p. 43; 1835, p. 47; 1836, p. 46 (9); Elliston's Almanack 1837, p. 50 (17); Statistics of VDL 1842, CSO 50 17, pp. 322-3 (14)

continuing supplement of the convict population as well as the free. In 1835 representations were made by the colonists in Hobart against the continuance of the settlement as a penal institution,[29] but transportation continued until 1852 to V.D.L. though ceasing in 1840 to N.S.W. Thus at the beginning of 1836 40 percent of the island's non-military population of 36,505 were convicts,[30] a considerably higher proportion than in the capital. A second persistent feature was that a mere 10,756 or 29.5 percent of the whole non-military population were females,[31] so that again Hobart Town was significantly more balanced than V.D.L.

The Convict Population

There is no question but that the prisoner and ex-prisoner population permeated the Hobart social structure of the early decades, perhaps the more so because there was not a simple dichotomy of the free and the convicted. In 1842 when the bond population of V.D.L. was 20,332, 17.1 percent were on ticket-of-leave, 24.3 percent were in private assignment, and the remaining 58.6 percent were 'in government employ'.[32] Even though these proportions cannot be directly transposed to the town the convicts of varying degree were certainly omnipresent. In fact the progress of the settlement substantially depended on their labour and the demand for it continued through the 'twenties, 'thirties, and even into the early 'forties when economic recession rendered the continued demand inappropriate.[33] It is not particularly relevant here to examine the merits and demerits of the convict system, which has been fully exposed elsewhere (20, 21, 22, 23); suffice it to say that a system which introduced about 57,000 transportees into V.D.L. in thirty years from 1817, compared with about 20,000 free immigrants in approximately the same

29 H. Melville: The History of VDL, pp. 161-4 (18)

30 J. Ross: Hobart Town Almanack, 1836, p. 46

31 Ibid.

32 Statistics of VDL, 1842, CSO 50 17

33 See R.M. Hartwell: The Economic Development of VDL 1820-1850, pp. 76-82 (19)

period,[34] and which provided about 4,000 of Hobart's 14,000 people in 1837, did not make for 'normal' social and administrative conditions. The best contemporary record of the integration of people who were transported with those who freely emigrated to the Hobart vicinity is to be found in the manuscript returns of the New Town census of 1837, which also provides other demographic evidence.

The New Town Census of 1837

New Town may not be entirely representative of Hobart Town. It has already been suggested that it was a settlement of farmers, civil servants and professionally employed, probably almost entirely devoid of the artisans and labourers who were by then numerous in the main settlement. New Town was not quite contiguous with Hobart Town, whose limits coincided with the area of Sprent's survey and whose "suburbs" at the time of the 1841 census extended to the junction of New Town Road and what is now Pedder Street (just north of Stoke Street on Figure 9.5), then eastward around the northern end of the Domain. Most of the area between the Arthur Street town boundary and the beginning of New Town at the northern suburban boundary was still farming land.

The 1837 New Town census comprises 195 household returns (Appendix XIX), which are summarised in Table 9.J. A few sources of error exist, but they do not significantly affect the overall

Table 9.J

Summary of the 1837 New Town Census

Factor	Free					Convicts		
	Over 14 yrs		Under 14					
	M	F	M	F	Total	M	F	Total
Number	337	240	177	164	918	377	51	428
Percent	36.7	26.1	19.3	17.9	100	88.1	11.9	100
Range per household	0-9	0-7	0-5	0-6	1-19	0-100	0-4	0-100
Mean	1.73	1.23	0.91	0.84	4.71	1.93	0.26	2.19
Median	1	1	0	0	4	1	0	1

Source: Census returns for the district of New Town 1837 (25)

34 Ibid., p. 68 and R.B. Madgwick: Immigration into Eastern Australia, 1788-1851 (24)

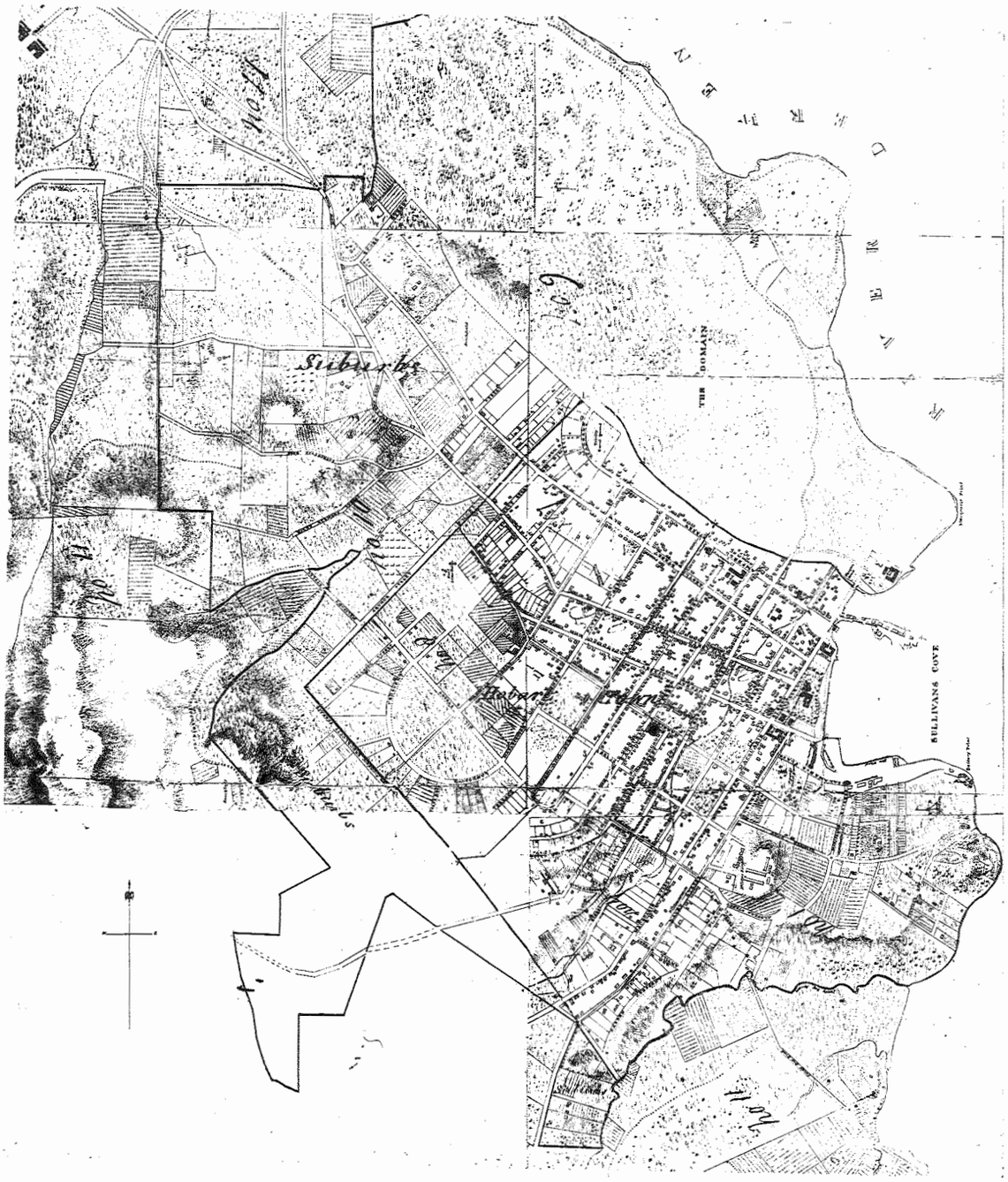

Fig. 9.5 1841 Census area of Hobart Town and suburbs. Arthur Street, the line of Knocklofty Terrace, the Sandy Bay and Domain Rivulets define the town. The 'suburbs' are mainly to the north. (CSO 8/17/578, State Archives)

analysis.[35] The most telling feature of the returns is that the average household complement was 4.7 free people (of whom 1.7 were children under 14 years) plus 2.2 assigned employees, making nearly 7 persons in all. For most of the households this convict average is too high. The median allocation was one convict, and if the two households having 100 and 30 convicts respectively were omitted the average for the other 193 was then 1.54 and the level of household occupance 6.25. An indication that the lesser socio-economic orders in Hobart Town may have maintained this size of household, presumably by replacing servants with children, is gained from details of the 1841 and 1842 statistical returns. The population in 1841 was 14,600 and in September 1842 there were 344 officers and men in the barracks and 495 prisoners in confinement in the gaol, the male house of correction, and the female house of correction. The maximum number confined during the year had been 1,033.[36] If we assume an unconfined population of approximately 14,000 living in about 2,100 houses (2,350 "houses" of the 1841 census, less non-residential buildings almost certainly included in that figure) the rate of occupance was 6.6 persons per house. The 37.2 percent of the free population who were children under 14 years may be compared with 31.4 percent of Hobart's population who were under 15 in 1961. Considering the imbalance of the sexes in 1837 -- 140 males per 100 females -- the capacity of the free population for natural increase seemed well proven.

Religion and Society

At this time there was recorded another facet of the developing V.D.L. population which both underpinned and stood in contrast with the more soul-destroying aspects of the penal system -- the religious

35 Several first names were illegible or represented by initials only so that allocations had to be made between male and female. One householder was accommodating the Glenorchy road party of 30 convicts, and another's wife was a convict. The claim of a Mr. Gazard to 43 children was ignored.

36 Statistics of VDL 1842, CSO 50 17, pp. 390-1

affiliation of the free inhabitants.[37] This was of more than

Table 9.K

Religious Affiliation of Free Inhabitants, Hobart and V.D.L. 1838

Area/ Age	Church of England	Church of Scotland	Roman Catholic	Wesleyan	Baptist	Independent	Quakers	Jews	Total
Hobart Over 14	4080	777	760	458	47	246	36	58	6,462
Under 14	2626	483	381	342	29	159	20	32	4,072
Percent	63.7	12.0	10.8	7.6	0.7	3.8	0.5	0.9	100
V.D.L. Over 14	10,250	1,611	1,572	747	104	394	50	86	14,814
Under 14	5,844	940	716	542	71	241	30	46	8,430
Percent	69.2	11.0	9.8	5.5	0.8	2.7	0.3	0.6	100

Source: Elliston's Almanack 1838, p. 54 (17)

token importance in the formative years of Hobart Town. Religion had been a feature of public life from the foundation of the settlement; the Rev. Knopwood held an important place in the small official hierarchy of Collins' day, despite his being deficient in qualities of leadership. The pattern continued, with considerable faith (but less substance, by way of clergy) among Colonial Office officialdom in the uplifting, salutary, and even redeeming rôle of religious instruction in the life of the colony. But intent was not achievement, and successive administrators faced disheartening evidence of a population largely unmoved by moral teaching. For the convicts the conflict between the rigorous daily round, sometimes including deep physical suffering and degradation,[38] and matters spiritual is easily understood. The other inhabitants might reasonably have been expected to respond.

37 Exclusive of the military. Total V.D.L. population (without the military) was 41,512, composed of the 23,244 in Table 9.K and 18,268 convicts.

38 See J.V. Barry: Alexander Maconochie of Norfolk Island, p. 31 ff. (23).

Governor Arthur was "an enthusiastic and earnest supporter of the propagation of religious teachings"[39] and took positive measures to link religion and secular education in the course of his influential administration. Soon after his taking office in 1824, however, he indicated the kind of material with which he had to deal:-

> "The moral improvement and discipline of the convicts is by your Lordship's instructions considered a main point in the administration of these colonies. In both these particulars, much must depend upon the co-operation of the settlers, amongst whom so large a body of the convicts are dispersed; but in place of raising the character of their servants, their habits almost universally encourage these dissipated propensities. This, with the better class of settlers, arises partly from the dread generally entertained of the convicts, and partly from the desire to prevail with them to work on any terms.
>
> Amongst the lower class of settlers, there is such a universal propensity to excessive drinking that they rather corrupt than reclaim the servants who are assigned to them. I have already drawn off from these people, in cases of particular abuse, the servants who have been given them; but it is not possible to apply this principle extensively without assembling still larger bodies of convicts in the towns in Government Employment, and thus a greater evil would be produced."[40]

The prevalence of drunkenness has been substantiated by other observers,[41] the frequency of inns and grog-shops being the enabling medium and the substantial imports of spirits (as indicated in Table 8.F) being the direct cause. There is little doubt that by personal example and administrative means Governor Arthur improved this poor state of society. Reduction of dissipation coupled with encouragement of church-going and education found a state of "improved — though not yet perfect — public morality"[42] by 1835, despite the disruptive actions of some of the clergy and their flocks in the face of the Governor's quite remarkable trans-denominational outlook.[43]

That Hobart Town society was pretty rough in the 'twenties and 'thirties could hardly have been otherwise, given the origins of the population, the isolation of the community, and the constant

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39 M.C.I. Levy: Governor George Arthur, p. 174 (22)

40 Arthur to Bathurst, 15.8.1824, HRA, 3, 4, p. 161

41 For example, A. Prinsep: The Journal of a Voyage from Calcutta to VDL, p. 113 (26)

42 M.C.I. Levy: op. cit., p. 176

43 Ibid., Chapter 12 — Penal System: Churches, pp. 174-205

infusion of new offenders against law and custom, not all of whom were as blameless as George Loveless and his co-martyrs. That the settlement should succeed at all in the early decades, much less develop at a rate comparable with Sydney or Cincinnati, says something to the credit of the inhabitants. So did contemporary observers, though not all were unqualified in their praise. Thus, at the end of the 'twenties Mrs. Prinsep found that "most of our new friends have sprung from the lowest democracy .... the next generation will certainly expel the 'h' from its place in the dictionary, and admit it as a h'aspirate, to the h'apples, and the h'oranges."[44] While holding the opinion "that an English town is in general a more agreeable residence for a bachelor, in respect to society, than Hobart Town (or Sydney either)", Lieut. Breton felt that with one or two good letters of introduction a person "may get on well enough both with the aristocracy and the merchants, though decidedly better with the last!" He refuted the claim of an officer that the settlers were inhospitable:"any person who has been as much about the colony as myself will agree... that a more hospitable class of people cannot be found in any part of the world."[45] An even more experienced colonist rhetoricised: "Who, that has employed prison-labour to the extent that I have done, can deny that, out of every ten, six at least proved, not only hard-working and most useful servants, but were really men of fair general character? On this point, however, much depended on the treatment they received from their masters."[46] Mrs. Meredith, whose residence extended through most of the 1840s, found herself wholly at a loss as to "why our peaceful lives should be represented at home as invested with such terrors by day and perils by night."[47] However, Hobart at the beginning of her residence "was certainly not in advance of Sydney

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44 A. Prinsep: op. cit., p. 117

45 Lieut. Breton: op. cit., pp. 328-9

46 G.T. Lloyd: Thirty-three Years in Tasmania and Victoria, p. 303 (27)

47 C. Meredith: My Home in Tasmania....Vol. 1, p. viii (28)

in point of society or intelligence, and the constant efforts of Sir John and Lady Franklin to arouse and foster a taste for science, literature, or art, were more often productive of annoyance to themselves, than of benefit to the unambitious multitude." She went on on, almost prophetically"

> "Unhappily the perpetual petty squabbles and quarrels which seem to form an indispensable part of all small communities, and were especially rife in this little fraction of a world, occupied its attention too exclusively to admit of any great interest being felt in subjects not immediately connected with individual success or advantage."[48]

Happily, on returning to Hobart *circa* 1845 after five years' absence, Mrs. Meredith found a general improvement in conversation and society, added to which "sketching and water colouring were a fever, Mr. Prout having brought the infection and was now taking classes."[49]

Military Administration

While it was not necessary for residents to go daily in fear of their lives, and the social milieu was being constantly improved through the churches, the schools, and other organisations based on community of interest, and while even the continued upgrading of the townscape introduced some feeling of pride in place, it was on the military that the administration depended for the maintenance of order and security. Gov. Arthur captured the ethos in 1824, when, drawing attention to bushranging and aboriginal hostilities, and to the "more respectable order of settlers" recently attracted to the colony, he wrote:-

> "It is impossible to leave the towns, where the principal body of the convicts are assembled, without some protection; and it is quite essential to keep a few men to act upon an emergency for the common protection of the community."[50]

The Governor suggested that 500 men would not be an excessive force to protect an island containing 6,000 prisoners. Even so, when in 1842 the convicted population totalled 20,000, the troops

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48 *Ibid.*, p. 29

49 *Ibid.*, Vol. 2, p. 204. J. Skinner Prout's own engravings were a real contribution to posterity.

50 Arthur to Bathurst, 15.8.1824, *HRA*, 3, 4, p. 162

Fig. 9.6 Twin stone Government Buildings, Murray Street, 1838. Court House on the corner and Police Offices beyond. Now the Tourist Bureau and the Treasury, linked by another Lee Archer section (Tasmanian Museum collection).

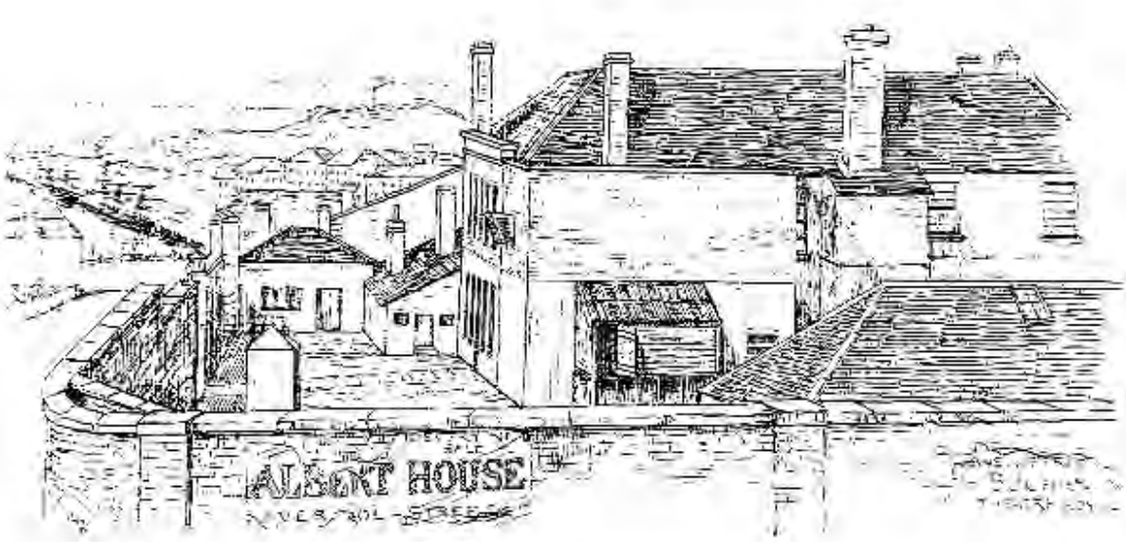

Fig. 9.7 The original Hobart Gaol and female factory in Murray Street, 1848. Facing the buildings in the previous figure. New Wharf and the warehouses of Salamanca Place are sketched into the background (Tasmanian Museum collection).

numbered only 1,026 officers and men[51] of whom 16 officers and 328 other ranks were in the Hobart Town Barracks, 46 of them in huts at the rear of the main buildings.[52]

With less than 2 1/2 percent of the town's population the troops were hardly thick on the ground; barely, it would seem even on the parade ground. At the same time the rôle of the military in the community was beyond question, though it must have been a declining one in society. Macquarie's Barrack Hill was a landmark throughout the infancy and youth of the town, featured in many contemporary illustrations. The Barracks themselves were the greatest complex of buildings in the urban area, symbolising the power behind the Governor's vice-regal authority; despite which some residents had encroached upon the southern corner of the military allotment in 1844 (Appendix XX). Almost in the centre of town, a stone's throw from Government House, the gaol in Murray Street was until mid-century a prominent and constant reminder of the evil in society (Figure 9.7). Its function, too, was backed by military authority. Nevertheless, civil authority had now been established on a firm basis, following the independence granted the colony and its Supreme Court in December 1825. The Court House in Murray Street opposite the gaol (Figure 9.6) lent a quite imposing physical dimension to this developing aspect of community life. However, if internal organisation of the urban society was evolving a broader base its external security depended again on the military. The Napoleonic Wars were long past, the French were no longer a positive colonial competitor, and no immediate threat from the sea was apparent, but in 1838 Hobart Town was checking its defences with a proposed quadrilateral of interconnecting coastal batteries on either side of the port and across the Derwent roadstead on Kangaroo and Bellerive Points (Figure 9.8). The quaintness of the lines of sight -- "from a mast in the paddock to the fourth house near Kangaroo Point", for example -- should not obscure the accuracy of the measurements ("78 chains 50 links or 3/4 mile and 18-50 links") or the determination of the now established town to succeed.

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51 Statistics of VDL 1842, CSO 50 17, p. 288

52 Ibid., pp. 292-3

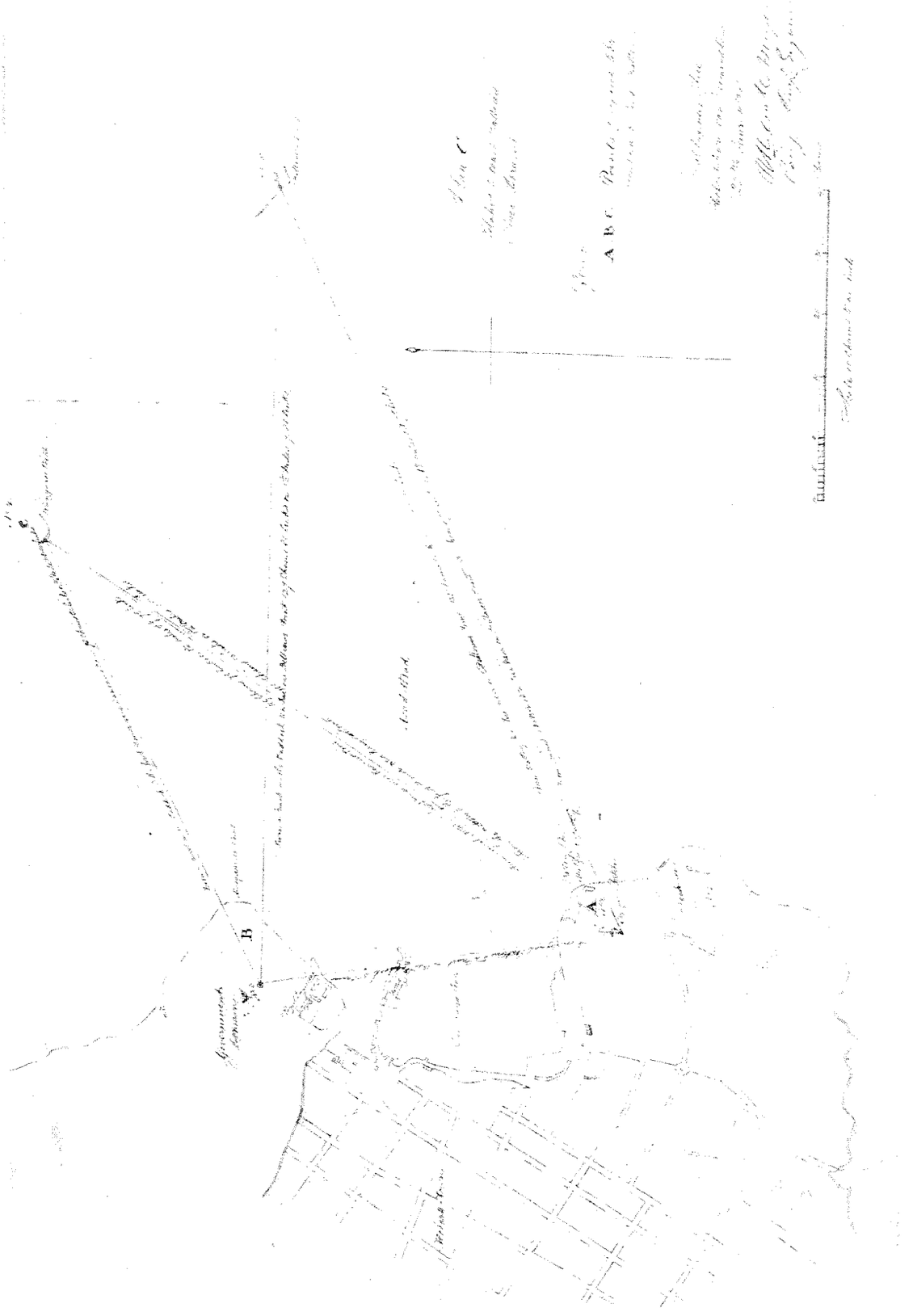

Fig. 9.8 Proposed harbour defence batteries, 1838. Batteries proposed for Macquarie (B) and Kangaroo (C - now Rosny) Points to supplement the Mulgrave Battery (A). (MPG 700/3, Public Record Office).

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Part 3

Hobart in the 1950s and 1960s : a State capital

"Towns are the dwelling places of profane mortals;
the gods inhabit rural retreats"

— Rousseau

"....ample evidence that the germ of a rigorous and healthy intellectual community has been planted in this remote colony; which may in time mature into a 'Modern Athens' in the Southern Hemisphere, and be the means of rousing the whole Australasian group from that intellectual torpor, which, during the present devotion to Mammon, seems to pervade it"

— H. Butler Stoney:
A Residence in Tasmania, 1856.

Not even the most indulgent of Hobart's champions would claim that Stoney's vision of an antipodean Athens has come to pass, though the intellectual germ lives on. A little more than 100 years after its mid-nineteenth century exposure the population of the town passed 100,000 and grew almost to 120,000 by 1966. As the capital city of the smallest State in the Australian Commonwealth, Hobart and its island had come to share some of the status and problems of the Maritimes in Canada as the centre of gravity of that country moved westward.

Such a modest mid-twentieth century standing has some advantages. It has enabled a thorough examination of those aspects of urban form and function which engaged our attention in the colonial capital. Some data, notably property values and functions, are considered for the 1950s, others are brought into the next decade according to availability and other factors. It is not intended to follow the path of contemporary planning. The aim of this Part is to expose the structure of present Hobart so that the course of its urban evolution might be better understood.

Chapter 10

Townscape Analysis and the City Image

Sydney's popular reputation rests on its harbour its beaches and its extroversion, Hong Kong's on its thriving humanity in a confined and beautiful setting, New York's on its skyscrapers and cosmopolitanism, London's on its combination of history, culture, and urbanity, Istanbul's on its joining of East and West, Jerusalem's on its unbroken religious focality; and so on down the line. Many urban addicts have distilled the essence of the world's cities and the accuracy of their judgements may reflect their varying capacity to cope with such a heady brew.[1] Hobart's modest reputation is for historical charm in picturesque surroundings, and this, given the relatively unchanging nature of mountain and sea, depends upon the best representation of early buildings in Australia. Sydney is of course the only competitor in the colonial (namely Georgian) field and although it has some excellent relics (as in Figure 1.6) the few concentrations remaining are overwhelmed by more recent developments.

Brief assessments of urban character or personality depend very much upon the physical characteristics of the site. These may be enhanced or even obliterated by human structures. Where those structures somehow provide visual appeal in reasonable harmony with the setting — whether by inherent aesthetic value, the cumulative effect of homogeneity, or even as anachronisms — they may be strongly associated in the public mind with the physical surrounds, and together assume a unique identity. There are many instances of settlements large and small acquiring a widely accepted identity

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1 The best attempt at capturing the flavour of a selection of present cities is possibly James Morris's Cities (1). Peter Hall's more selective The World Cities (2) is of course urban geography rather than literary reporting and is more concerned with the structure beneath the surface. From the morphological viewpoint Dickinson's The West European City (3) has not been surpassed, although numerous studies of single cities are more detailed. R. Stewig's Byzanz-Konstantinopel-Istanbul (4) is in this mould, while Coppock and Prince's Greater London (5) is a comprehensive survey of urban elements and Hall's London 2000 (6) is among the few which project their findings into the planning field.

or reputation of a substantially physical kind (not, of course, unrelated to functional attributes), but professional assessment of their townscape elements has usually been confined to architectural appreciation of specific buildings, singly or in groups. The present aim is through geographical analysis to define and assess the degree to which the colonial architecture of early Hobart Town is preserved, and therefore the contribution which it is makes to the present townscape and to the city's reputation for historical interest.[2]

There is no lack of awareness of relict features in the general application of geographical techniques, although there may be some lack of agreement as to what constitutes a relict features.[3] Geomorphologists must constantly take account of relict phenomena (on a somewhat extended time-scale) in their interpretation of landforms, but our more transient cultural remnants have received sporadic attention at best. There is good reason why the European practitioner,

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2 Since this work was undertaken in 1962-63 and a paper (7) on it was published in 1966 two books which bear upon townscape assessment have become available. British Townscapes by Johns (8) is essentially a regional examination which ranges from some of the more romantic to some of the most ghastly Western townscapes. Its organisation has much in common with the stimulating American Skyline (9) published a decade earlier. Lynch's The Image of the City (10) is both systematically and literally a path-finder. It goes beyond what is attempted here on this particular theme, but the writer would like to think that its basic concepts are essentially those which underlay the present analysis. Whatever they may indicate in method, the gradually increasing number of such studies represent conceptually the desire to discover what people see, believe, and consider things to be, which is not necessarily all the things to be seen nor all the seen things as they are.

3 The basic problem seems to hinge on whether everything with an origin before the present is a relic. May that include features so far back as to be archaeological, and can it come so far forward as to embrace features which have been completed in their particular form, but against the later duplication of which there is no guarantee? A range of objects treated as relict may be found in the report on the proceedings of the 20th International Geographical Congress, London, 1964, pp. 164-8 (11). The author of one paper was prepared to regard fallen snow as a relict element in the landscape. If the time relationship is happily solved the question of function may arise, particularly in respect of buildings. Does a building of an obviously closed historical period have to be a museum to be a relic? Or if it may be lived in, what effect has modernising of the building upon its relict status? It seems that common sense must be allowed hopefully to prevail in taking account of particular conditions, but that any extant representative of a concluded era or phase of development may be regarded, as parents by children or 'A' model Fords by Thunderbird owners, as relics.

surrounded by abundant evidence of a long past, may find pieces of the earlier fabric commonplace. He has, nevertheless, used them in defining the frontiers of settlement, in explaining the original nature and extent of agricultural practices, and in tracing the growth of towns. The Australian student is not surrounded by such an Old World sense and depth of history (which leaves him poorer but more free), and against a short background of European settlement and a physically distant one of aboriginal culture material structure ante-dating this century are considered old. This underlines the interest which attaches to landscape components from the mid-nineteenth century or before.[4]

Students of urban morphology have concerned themselves largely with the functional aspects of town structure, emphasising present or recent landuse. Two notable exceptions have been Watson's classification of relict zones (12) and Conzen's attempt to systematise the analysis of urban landscapes (13), including consideration of both the two-dimensional and three-dimensional elements of the townscape: town plan and building fabric. This section is chiefly concerned with the second of these, although the "often overwhelmingly important" (14) area-contribution of more recent accretions around the original kernel will not be forgotten.

Townscape Classification: Building Styles

With the architectural characteristics of colonial Hobart (see Chapter 1) in mind, a survey of the inner city townscape was undertaken. This meant, first of all, that there should be no confusion as to alternative building styles. An examination of buildings showed, as with several townships studied in northern Tasmania (15), that the post-colonial domestic dwellings fell very substantially into a few main architectural categories: Gothic Revival, Italianate, Queen Anne, Bungalow and Contemporary. These were all sufficiently

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4 This interest is given limited practical effect by the activities of the National Trust, invariably concerned with restoration or preservation of single buildings. Government support of the kind provided through the British Ministry of Works, or private support on the scale that the Rockefellers provided for Williamsburg, Virginia have yet to be attracted.

Fig. 10.1 House built before 1845, West Hobart, 1963. Symmetrical Georgian facade and twelve-pane windows, but atypical gable roof. Verandah foundations now cement-rendered.

Fig. 10.2 Two-storey colonial house, North Hobart, 1963. Symmetrical construction, but bay windows, castellated effect not typically Georgian.

distinctive from the Georgian style that variants on the standard Georgian pattern were more likely to confuse than they. The gabled cottage (Figure 10.1) occurs occasionally, other variants such as that in Figure 10.2 very rarely.

The introduction of the asymmetrical Gothic Revival plan was the first main stylistic modification to Georgian building in Tasmania (Figure 10.3). The forward line of one projecting room was characteristically completed by a verandah, a combination which thenceforth in its essentials survived several changes in the rural and urban dwelling styles of Australia over the better part of a century. The form shows out to better advantage in the two storey houses than in the lower buildings, which often lack the same distinction of high gable and fretted bargeboards. However in either elevation it is not nearly as common in Hobart as in rural areas and townships which were developing after 1860 while Hobart's rate of growth slowed considerably. On the other hand, the ornamentation and relative complexities of the Italianate and Boom Style phase of the late nineteenth century largely passed the smaller settlements by, although they are well represented among the homesteads of the larger grazing properties. In Hobart they infilled vacant lots and replaced frail structures in the North Hobart vicinity, particularly along Murray Street and near Trinity Church (Figure 10.4). The parapet feature was fairly commonly adopted by commercial premises, but overall the Italianate influence was not extensive.

During the early twentieth century there was added a substantial sea of houses which displayed elements of the style called Queen Anne by Boyd.[5] In country areas some spacious examples embody the whole

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5 The ruddy hue of the red bricks and orange-red terracotta tiles gives the houses of this style something in common with the English Queen Anne of two centuries earlier. But the use of the term in Australia is probably unfortunate: the English Queen Annes were simple and tasteful forerunners of the Georgian whereas "Queen-Anne, in her strange Australian costume, was the first of some half-dozen major exotic or period revivals" (16) for which the title Art Nouveau may have been appropriate. The style was largely built too late to make 'Victorian' appropriate, though one interested student of mine who refused to use 'Queen Anne' and thought 'Art Nouveau' a little precious settled for 'Edwardian'. Perhaps a descriptive term such as 'red-brick' would do.

Fig. 10.3 High-gabled Gothic Revival house, South Hobart, 1962. Asymmetrical front, small porch, carved vergeboards. Next door — a small, square unusual suburbial house utilising roof space for a second storey.

Fig. 10.4 Italianate house, North Hobart, 1963. The degree of ornamentation far exceeds that of the Georgian and Gothic Revival forms.

range of structural and decorative features, from high, capped roof with Marseilles tiles to leadlight or coloured windows. More often such distinguishing features are sparse and subdued, confined to rough cast above the front room and curved tiles at the ridge cap (Figure 10.5). In Hobart the majority of this type are positively spartan in their lack of embellishment, and many were probably put up at low cost by speculative builders (Figure 10.6). In some instances the very simplified Queen Annes lack any great distinction from the early Gothics on the one hand or the later Bungalows on the other.

The English usage of 'bungalow'[6] would apply to the vast majority of Australian houses, but its identification here is with the Californian Bungalow and it takes the form of a compact, low-roofed and sometimes rough-texture plastered house in which a pylon-supported porch roof before the main gable is the simplest point of recognition (Figure 10.7). Boyd puts the main period of its construction at 1912-1925, but as with other styles it seems that most architectural features came into vogue rather later in Tasmania than on the mainland.[7] There is little evidence of the bungalow before World War I nor of any other major development of style until the economy cottages of the 1940s. Within the Contemporary classification are several modern variations of the bungalow, including the L-shape and a few squared versions of the waterfall-front. Those built by do-it-yourself builders (often ex-servicemen of World War II) and Housing Departments tend to be austere, box-like, timber-walled, the facades broken by a small, central cantilevered porch which achieves neither the shade nor the restful appearance

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6 Meaning 'belonging to Burma' and applied to one-storey houses with thatch or tile roof.

7 Morton Herman (17) divides Sydney's architecture into three main building periods: Colonial Georgian to 1850, Victorian 1850-1900, and Modern from 1900. The styles identified here, associated centrally with building periods are: Georgian pre-1860, Gothic Revival 1860-1890, Italianate 1870-1900, Queen Anne 1890-1920, Bungalow 1920-1940, Contemporary post-1940.

Fig. 20.5 Queen Anne house, West Cohasset, 1913. Tall columns, bay window with coloured glass at top, and verandah fretwork are distinctive of the style, but terra cotta tiles, multiple gables etc. are missing

Fig. 20.6 houses in Long Island, Sandy Bay, 1958. These are very stylish versions of Queen Anne style built late last century or early in this, with more intent than attention.

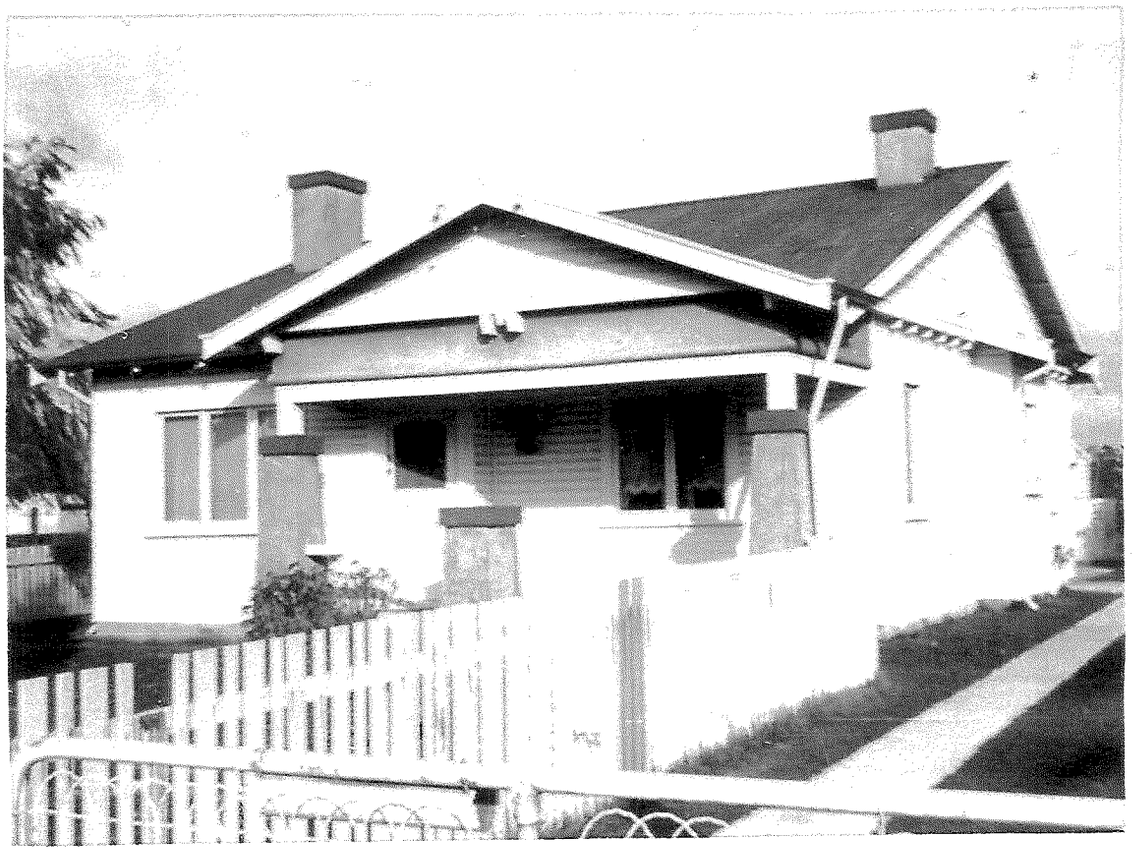

Fig. 10.7 House in Bungalow style. Main gable roof parallels the frontage, second gable covers the typically pylon-supported verandah.

Fig. 10.8 Contemporary (mid-century) successor to the Australian bungalow house, in one of its varying forms. Rectangular rather th square, low or flat roof, large areas of glass (sometimes floor ceiling), built-in garage. This example built 1959, Sand

of the colonial verandah or the Bungalow porch. These basic examples are widely improved upon in design, materials and scale (Figure 10.8), though retaining a functional approach to the use of space and lower ceilings than in any building phase since the colonial.

Buildings other than houses tend to be less consistent in period features, and after the Georgian broke away from any close affinity with external residential design. However, it is usually possible to recognise points of identity without the need to investigate individual building histories, so that the wholesale premises in Figure 10.9 and the hotel in Figure 10.10, for example, could be placed in their correct periods without difficulty.

Townscape Preservation: Classification and Assessment

Having a good grasp of Georgian diagnostic elements, having isolated the Georgian (equals colonial) buildings with fair confidence, and armed with photostats of Sprent's survey plans, it was determined in the field whether or not each building shown on the survey was recognisably extant. This provided relatively few problems, since observed form and style were usually in accord or not in accord with the surveyed position on allotment and with size and configuration of plan. Sometimes what appeared very much to be the 'right' building was in the wrong place, and a decision had to be made on what amounted to credibility of evidence. In really difficult cases enquiries were made, locally if possible, concerning ownership and title.

One could,at this stage, have made some assessment of the impact and persistence of the existing colonial structures by relating their number to the total buildings, past and present. Although some of the early buildings are in excellent architectural condition many others have been modified in various ways. Since a street with extensively modified houses provides less sense of period than a stylistically pure vista, it seemed necessary to take account

Fig. 10.3 Fenêtre style Victorien embellissant l'extérieur d'un immeuble de la rue Queen, 1983. Adjoignant en cet endroit à un bâtiment colonial plus ancien.

Fig. 10.4 Maisons modernes au bord de la mer à Sandy Point, Sandy Bay, 1985. Une demeure ancienne se trouve au milieu.

of such variations in any assessment of the contribution made by the colonial relics. Clearly, structural alterations involving a change in the essential balance of a building through the addition or subtraction of rooms or a complete change in roof style are more serious than superficial modifications in the form of dormer windows, new chimneys, porticos, plate glass, or paintwork. However, the harmony and integration of the modified elements with the original structure, rather than the simple sum of the changes, is responsible for the total effect, which therefore calls for some kind of consistent subjective assessment.[8]

Accordingly, the survivors of the colonial buildings once surveyed by Sprent were classified street by street and placed as consistently as possible[9] into five categories:

1) essentially unmodified
2) superficially modified
3) modified but structurally intact
4) extensively modified
5) completely removed.

Thus the warehouse row in Figure 10.11 was differentiated by minor changes from those shown in Figure 1.17 and was allocated to category 2. (The building in Figure 1.7 exemplifies those in category 1). The brick row in Figure 10.12 had received significant but non-structural modifications and so was similarly placed. Changes to structure without removing the essence of the building are shown in Figures 10.13 and 10.14. One derived from residential to industrial functional change, the other from expansion and variation of the initial residential

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8 Consideration was given the possibility of summing the points allocated to a variety of altered features, but was rejected in favour of the 'total impact' approach. A case in point is the seaward (southerly) half of Archer's Ordnance Stores, where the whole storey added early in this century escapes the notice of most people, despite the unobstructed view of the buildings in an exposed position. This is entirely due to the harmony of the addition with the original (Figure 10.17). The building was therefore (admittedly exceptionally for such a change) assessed as little modified (Appendix VIII, Section 13).

9 An assistant joined in a check of the early classifications, aimed at securing consistency of allocation through discussion of variations as they were met.

Fig. 10.11 Terraces, Belmarna Place, 1965. View onto rear yard of their homogeneity despite differential painting and door and window treatment.

Fig. 10.12 Two-storey terrace on Bath Terrace(?) (Bath, Somerset, Parade Gdns., 1965. Twelve-pane windows replaced by large glass, doors and bills painted, otherwise unaltered. Demolished 1965.

Fig. 21.13 Modernization of existing brick to show the advantages of a prefabricated storey for industrial (Blackwell) purposes. Shipbuilders Retreat, Old Delaware Place, 1964.

Fig. 21.14 Semi-permanent Georgian house type, readily recognizable despite replacement central bay and modern accretions, adjoining new factory (see) at left. F.M.G.A. Social, Liverpool and Argyle Streets, 1965.

function which left the original structure whole but altered its total balance and impact. The extensive modifications to the buildings concerned in Figures 10.15 and 10.16 placed them clearly in category 4.' Unlike the YMCA building, the enclosure of what may have been an original verandah (built with the house) together with the added alien wing have almost submerged the Georgian cottage on to which they were grafted. Although the illustration makes it perfectly clear that the cottage exists its presence goes unsuspected by many passers-by. There is no doubt whatsoever that the formerly gabled residence shown gutted in Figure 10.16 has been extensively modified. More often, the kind of treatment meted out involves the reduction of the walls to the foundations, or the removal of either the back or front of the building for extension or face-lifting.

There is a difficulty of interpretation when the frontage has been substantially altered though the rear remains in mint condition. The original structure has clearly not been completely removed, but from the viewpoint of townscape at pavement level it might well have been. At this juncture it is necessary to allow that other elevations are relevant, and that the roof line, building materials, or rear silhouette as seen from a more embracing vantage point at least entitle the original to some measure of existence. The building in Figure 10.18 illustrates a variation of the same problem (the Ordnance Stores in Figure 10.17 have already been referred to). Here the original is completely intact and in good repair, but from close frontal proximity all that can be seen is the office block addition. Move across the street, to the rear, or above ground level and the upper floor is revealed.

The condition and distribution of the relict colonial element of the 1840s in 16 blocks is shown in Figure 10.19. The general level of clearance is high in this commercial core zone, where functional development even without change of function dictates a more transient existence for buildings than in consistently residential areas. Part of the extensive removal in this area stems also

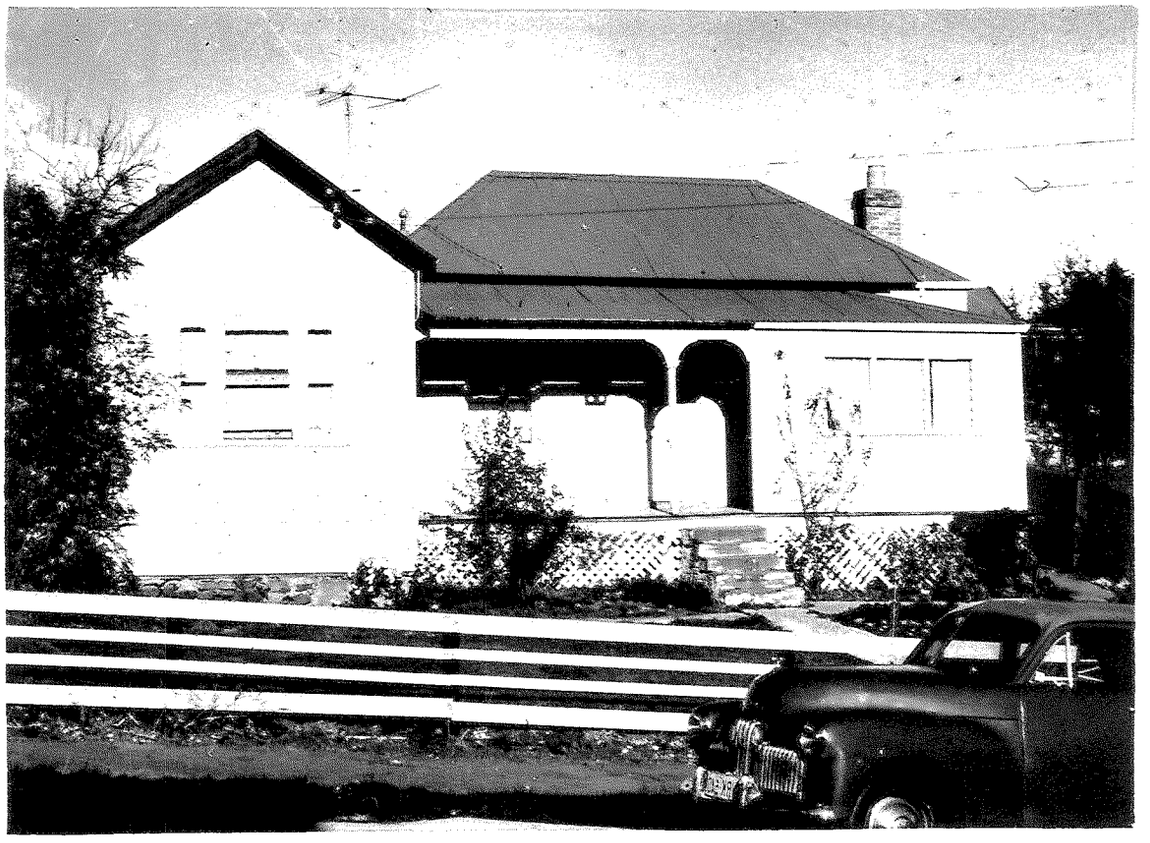

Fig. 10.15 A Colonial Georgian brick house has its contribution to townscape character much modified by timber additions of an alien wing and a verandah 'sleep-out' enclosure. West Hobart, 1963.

Fig. 10.16 A gabled colonial building, originally residential, is gutted for transport access and operations. Brisbane Street, 1963.

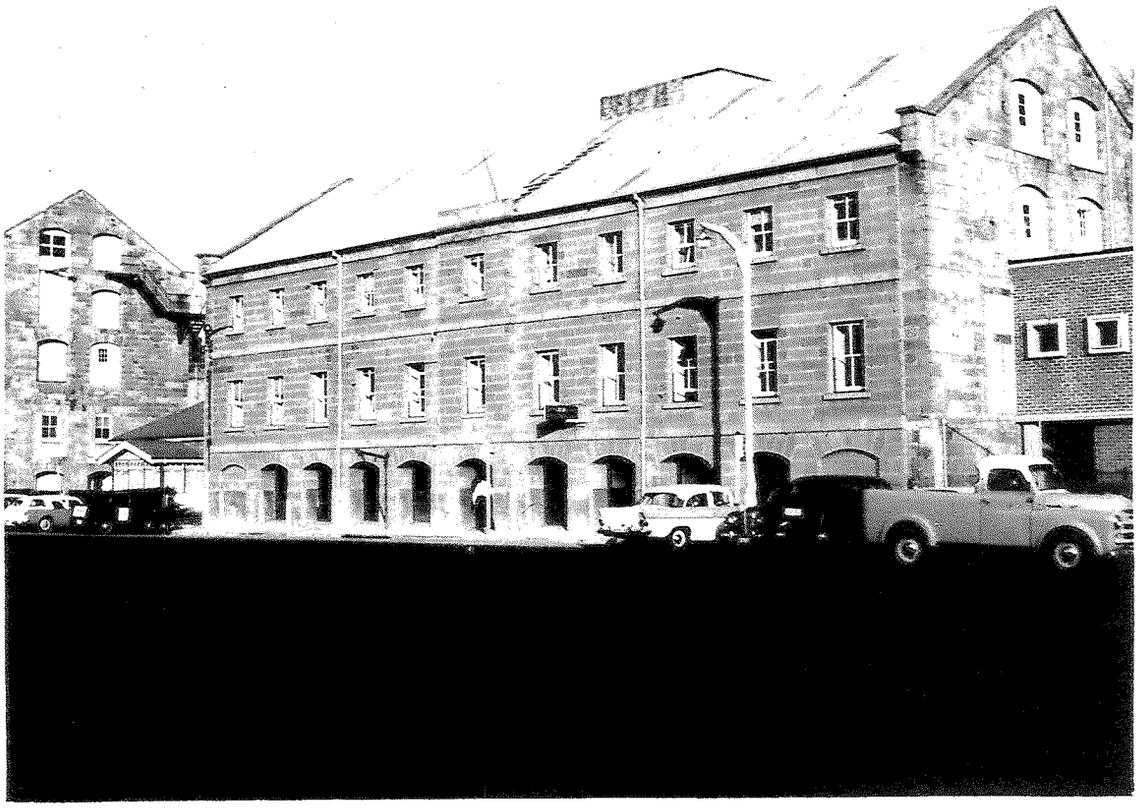

Fig. 10.17 Ordnance Stores, Princes Wharf, 1963. A fourth storey was an early twentieth-century addition to the building at left, but the two buildings were never joined by a central pavilion as intended by Lee Archer.

Fig. 10.18 A typical two-storey Georgian building with linked cottage is structurally sound, but wholly or partly (according to viewing-point) obscured by an office structure placed in front. Macquarie Street, 1963.

from the high incidence of interior-of-block building in the early decades of settlement, conditions which are now less permissive owing to health and fire regulations.

The qualitative process of map inspection can be given a simple quantitative dimension by the allocation of values in arithmetic progression to the categories of building preservation defined above. By summing the scores for any particular block (or street) and relating the figure to the maximum possible for the number of buildings in the area, either as it was over a century ago or at the present level of building density, an assessment of relict building strength was obtained. Using a scale ranging from score 0 for buildings completely removed to score 4 for those preserved without significant modification the blocks in Figure 10.19 showed a preservation level varying from 1.4 percent (of the 1840s possible) to 37.0 percent. The average for the four blocks around the point of highest land values was only 5.7 percent, resulting from the high degree of substitution in the development of CBD functions. In the next ring of blocks surrounding the innermost core the replacement and modification of the older buildings, although considerable, was predictably less severe. For the eight blocks of this ring which appear on Figure 10.19 the colonial remnant was 14.5 percent.

The five preservation categories have been applied to all Hobart Town of the 1840s (Appendix VIII, Sections 1-14), but the problem of scale reduction is considerable if one wishes to view these data in a composite map at page size. So as to see the area as an entity and be able to compare it with the unmodified distribution of Sprent's survey (Figure 1.3) the five-category classification was generalised to three degrees of preservation by merging the first two and the last two and leaving the middle category unchanged. Its application may be seen in Figure 10.20, and in Table 10.A the 14 mapping sections of the town are shown with their preservation scores. These relict proportions varied from 6.7 to 57.7 percent and the average for the whole -- the Index of Preservation -- was almost 24 percent. At the individual block level the values ranged

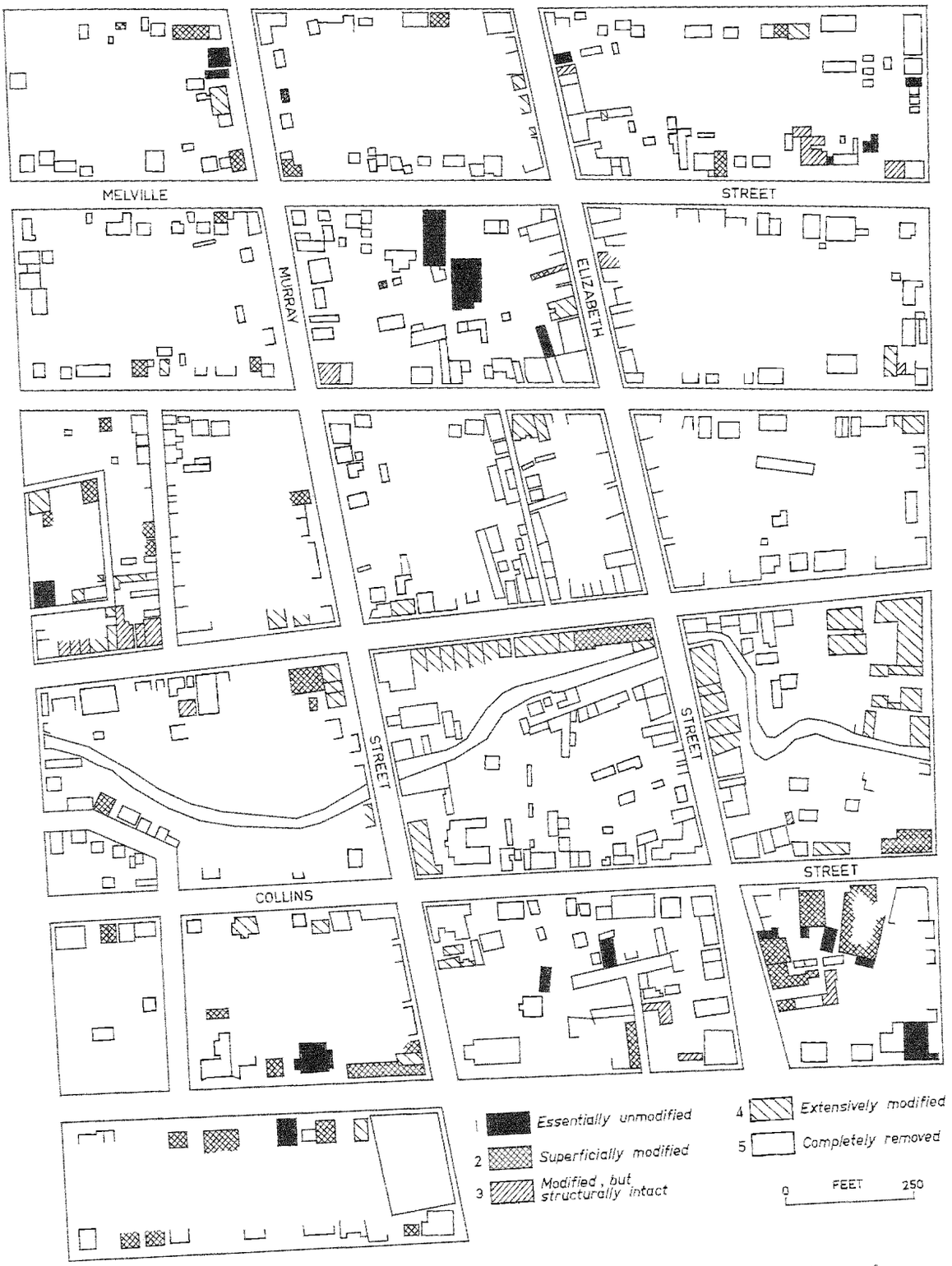

Fig. 10.19 The state of preservation of colonial buildings in 1962-63 in sixteen blocks of central Hobart. (Field survey 1962-63)

Table 10.A

Preservation of Colonial (1840s) Townscape of Inner Hobart

Section	Number of Buildings	Maximum Score Possible	Actual Score	Percentage Preservation
1	540	2,160	144	6.7
2	304	1,216	216	17.8
3	235	940	190	20.2
4	380	1,520	332	21.8
5	50	200	76	38.0
6	66	264	116	44.0
7	193	772	254	32.9
8	94	376	70	18.6
9	22	88	16	18.2
10	130	520	264	41.5
11	99	396	144	36.4
12	160	640	308	48.1
13	65	260	150	57.7
14	37	148	38	25.7
Total	2,375	9,500	2,270	23.9

Source: Field survey, 1962-63

from 0 to 100 percent and their distribution in six multiples of the area average appears in Figure 10.21. As the number of buildings per block varied widely a high level of preservation in a particular block does not necessarily mean that the relict buildings concerned had a major share of the recent townscape, but where a high index coincides with moderate density of occupation (as in Figure 10.20) it can be assumed that the colonial buildings have been collectively important in the contemporary scene. Certainly where the preservation index is low the 1840s structures are making little impact on the 1960s townscape. A few localities stand out as areas of high preservation. The dark blocks in the northwest (Figure 10.21) are somewhat deceptive as few buildings are involved. That part of Battery Point centred on Kelly Street with many small but some large houses stands high. So too does the South Hobart zone of high residential quality around Davey Street and Fitzroy Place. The third substantially preserved locality around Upper Goulburn and Upper Bathurst Streets in West Hobart is composed largely of modest houses at fairly high density. Another, more restricted, area of outstanding preservation centred on Burnett Street in the northernmost corner of Figure 10.21 at the time of the survey; since 1963 it has been razed in anticipation of provisions for increased traffic flow.

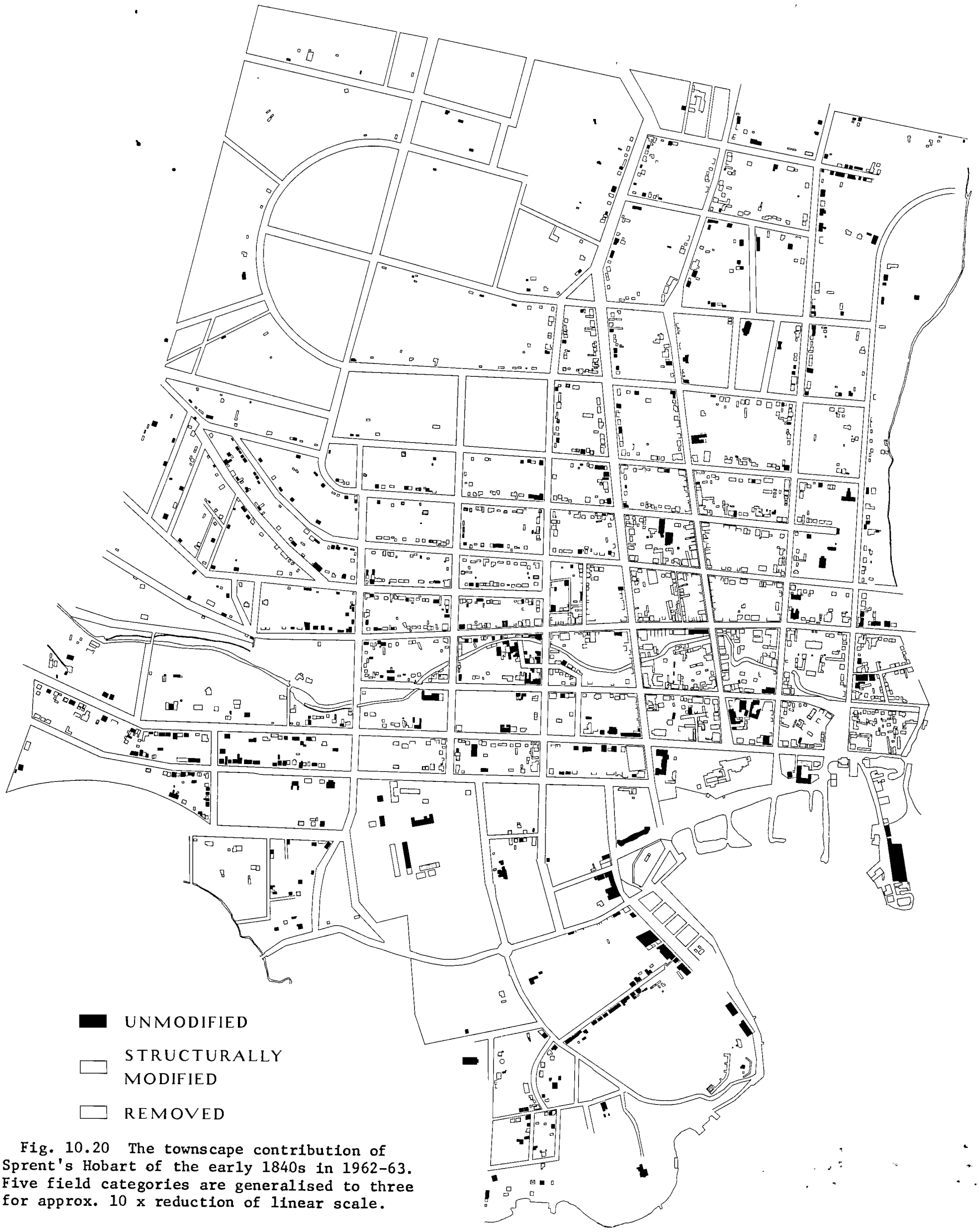

Fig. 10.20 The townscape contribution of Sprent's Hobart of the early 1840s in 1962-63. Five field categories are generalised to three for approx. 10 x reduction of linear scale.

The three main areas of colonial preservation index 48 and above each have adjacent blocks with higher than the average level, so that from West Hobart to Battery Point they form an almost continuous band of notable historical persistence. Its substantially residential character is undoubtedly responsible for this, in contrast to the area of generally low preservation extending from the city centre into North Hobart and the nearer blocks of West Hobart, which reflects the greater impact of commercial penetration.

In relation to the contemporary scene, rather than to the pattern of which they are the relics, the colonial buildings[10] have naturally a smaller place. In the most sparsely settled areas of the colonial town the subsequent infilling of vacant land, the extent of which can be seen in Figure 1.3, has produced as much as a tenfold increase in building numbers. However, a two- or threefold increase is more common and the resulting index is about ten percent overall. It appears, then, that public awareness of a colonial element in Hobart's inner townscape — its historical image, in fact — stems more from pockets of Georgian residences and a number of well preserved non-residential buildings than from any general dominance of period relics among the present building composition of the area of colonial settlement.

Two aspects of this situation deserve further comment. The first is that the relative decline in the proportion of colonial buildings resulting from both infilling and substitution may be to some extent offset, as far as direct visual impact is concerned, by greater contrast in style and materials with present structures than with more nearly contemporary ones. The tendency for period pieces to stand out against a backcloth of more familiar fabric relates particularly to the least modified buildings, and on this account there is possibly a case for weighting the scores of the higher categories on the preservation scale. The second comment

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10 The buildings of the 1840s, that is; there were additions in the Georgian idiom up to and, not very numerously, beyond political autonomy in 1853, so that the representation of the colonial period in Hobart of 1962-63 was rather stronger than the application of this technique to Sprent's survey allows.

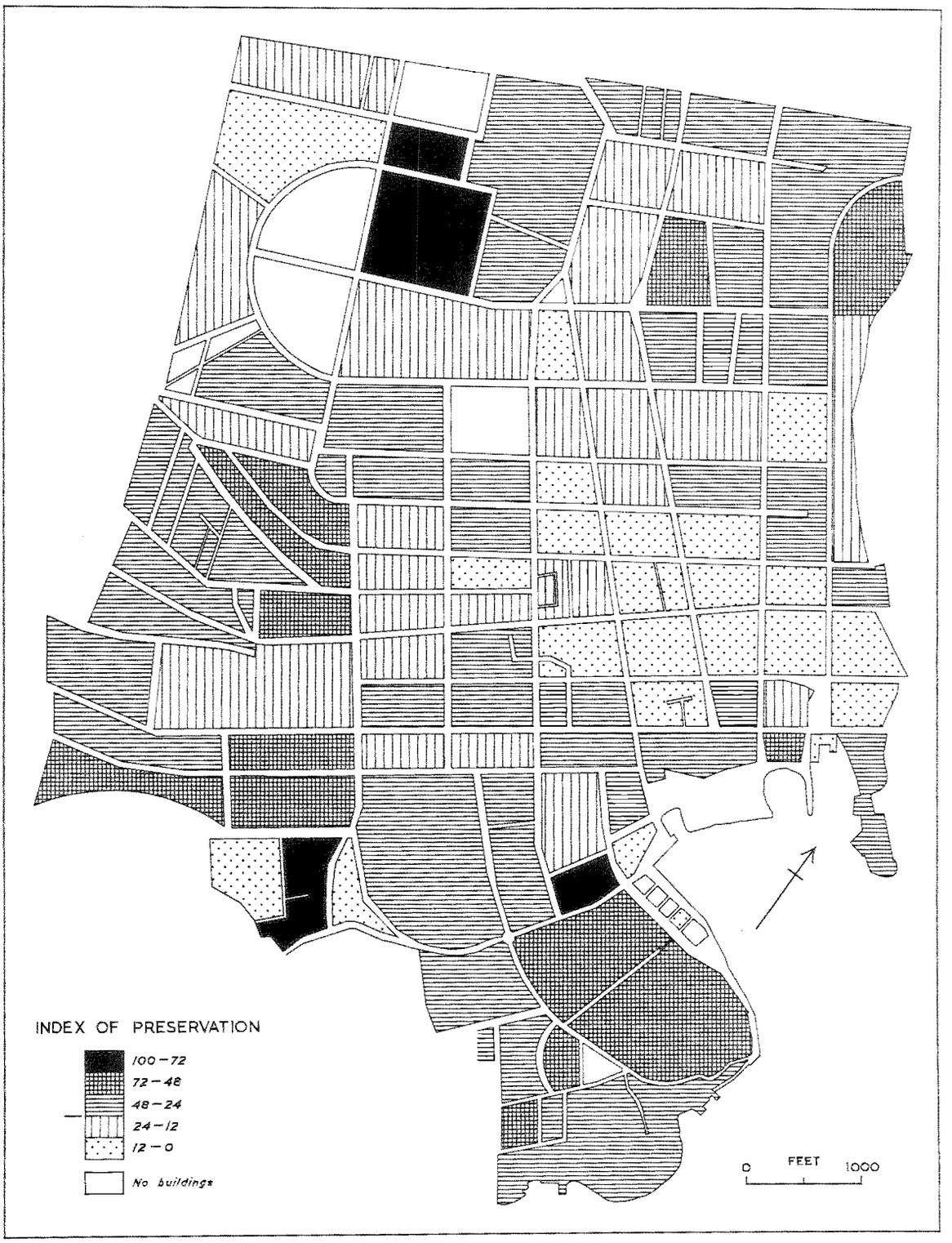

Fig. 10.21 Preservation levels of early 1840s buildings in the townscape of inner Hobart in the early 1960s. The overall level of preservation was 24 percent. (Field survey 1962-63)

concerns accessibility. There seems to be little doubt that some of the force and attraction of Hobart's colonial townscape element stems from its being easily accessible within the confines of a small city. Had there been greater initial dispersal and less contiguity of settlement the impact of the period would have been diminished. Alternatively, if the town had attained true metropolitan size the level of replacement would surely have been higher over much more of the inner area now under scrutiny. At the same time it is usual to find the historic structures of a town in or near the central area,[11] so the accessibility factor may apply with similar force in any centre of study.

Visual Aspects of Townscape

This chapter might well have begun with the following quotation from Price (18):

> "Mention the name of a city, and the mind of a listener who knows it will most likely identify it with a visual image, one of its landscapes."[12]

This is clearly the kind of appreciation which, like pioneer settlers' appraisal of agricultural resources (19), is almost the antithesis of close statistical definition. However, an attempt has been made above to employ an analytical procedure which makes possible at least one kind of controlled explanation of visual phenomena from a constant operational base. Such analysis provides a more refined measure of urban landscape composition and of the contribution made to the cultural concoction by any particular ingredient.

The immediate visual impact of townscape is important, nonetheless. It is probably more difficult of assessment than the townscape itself, but its aesthetic, educational, and even pecuniary influence is admitted in general terms. There is a wealth of difference between Old and New World townscapes: a difference which provides one of the continuing motivations for travel. But there are also significant differences between townscapes whose origins are much closer in time;

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11 For example: the Tower of London, Edinburgh Castle, the Galata Kulesi (tower) of Istanbul, the Royal Palace in Tokyo, Moskow's Kremlin, San Angelo's castle and the Pantheon in Rome, the walled town in Dubrovnik, Carcassone, Avila and Nördlingen, the arena in Nimes, the Plaza in Los Angeles.

12 E.T. Price: Viterbo: landscape of an Italian city, Annals, Assoc. Amer. Geogrs., 54, 1964, p. 242

Fig. 10.22 Sienese streets and tiled rooftops provide a townscape "composed primarily of buildings" in Siena, Italy. Cathedral from the Mangia Tower, Palazzo del Comune, 1950.

Fig. 10.23 A non-building townscape, Los Angeles. The escalator to right, below the car, visit nearby, is for auto use only. View from Civic Center, 1953.

there are, in other words, regional variations in townscape which, as Nelson noted (20), have received scant attention in English-language publications. A comparison of Figures 10.22 and 10.23 may help explain why Price found it necessary to record the apparently obvious in observing that 'urban landscapes, notably those in Italy, are composed primarily of buildings."[13] It is clear that some are not. When, however, we return to the buildings themselves as townscape elements, we find similarities as well as differences which not only make possible a process of selection and sorting in any one centre but permit, indeed stimulate, regional comparison. It would be difficult to consider Figures 10.24 - 10.26 without an awareness that these arrangements of bricks and mortar express the glimmerings at least of a common cultural heritage carried across many thousand miles of ocean. The example is not conclusive but is suggestive of a wide field of geographical enquiry awaiting the plough. The way was pointed long since by Sauer (21), and in closer relation to this particular path Kniffen has indicated the worth of tracing the diffusion of recognisable traits (22).

Although in the present context townscape rather than the component buildings is the end concern, the "real geographical differences to be taken account of by techniques of urban survey"[14] are the architectural or period characteristics of all the town's buildings, as in Conzen's study (13), or, locally, that by Goodhand and the writer (15), and their further analysis for assessment of condition, thereby providing a composite pattern of townscape character. In a quite fundamental way this character is as functional, or as representative of function, as the more commonly used employment groups, retail outlets and traffic patterns. If its first appearance is less dynamic than, say, traffic patterns, it might be borne in mind that the rate of urban renewal and townscape change in many areas (notably the U.S.A., where the operative verb is "tear down") subjects

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13 E.T. Price: ibid.

14 A.E. Smailes: Some reflections on the geographical description and analysis of townscapes, p. 101 (14).

Fig. 10.24 Colonial houses, Derby Street, Salem, 1963.

Fig. 10.25 Georgian houses and shops, Newgate Street, Alnwick, Northumberland, 1964.

Fig. 10.26 Millinery shop, Wiseman's shop, converted house and Talbot Tower, Isle of Gloucester Street, Williamsburg, Virginia, 1963.

the discrepancy to question. Differences in the time-process relationship may be as fundamental to the morphological-central place division in urban geographical interests as the qualitative-quantitative dichotomy. The geomorphologists do not appear to be deterred by the slowness of some of the essential agents of landform development; they take the results of formative processes and make inferences from them. Similarly tangible urban landscapes may be taken not only as "clear reflections of the culture of the people that built them" and therefore as basic material for comparative studies, but as essential facets of discrete urban phenomena and as clear indicators of functional change. The fact that physical (structural) form lags behind functional change is responsible for modifications to 'pure' townscape of the kind illustrated in Figure 10.27. Its wide association with urban growth (exemplified by Figure 10.28) has long been recognised by students of land use, though the duration of its persistence, either in particular situations or generally, is not widely known and represents an avenue of further investigation into the processes of urban development.

Perspective in Townscape

In his perceptive commentary on the need for perspective in townscape analysis Smailes noted a tendency to preoccupation with "urban origins and development" when so much of the present urban entity may be of quite recent advent (14), and the point cannot be ignored. Despite Hobart's relatively slow rate of population growth the areal importance of its suburban additions over the last century or so lend some support to the contention. Even so, a characteristically Australian low housing density makes more of the additions shown in Figure 10.29 and the frontispiece than one would expect to find in Asian or European, though not all North American, towns of equivalent population.[15] Gross residential densities of more than

15 Figure 10.29 was prepared from a variety of sources. Period town plans were the basis of the first four phases on the western shore, supported by intensive but not wholly consistent alienation records. The twentieth century additions rely on a generalised distribution of building styles together with sundry near-contemporary maps and air photos. The eastern shore is overstated in its 1839 occupation because of very low densities within the circumscribed area.

Fig. 10.27 Commercial functions deface a colonial residential townscape. Campbell Street, Hobart, 1963.

Fig. 10.28 Commercial invasion of suburban Palmer's Green, North London, 1964.

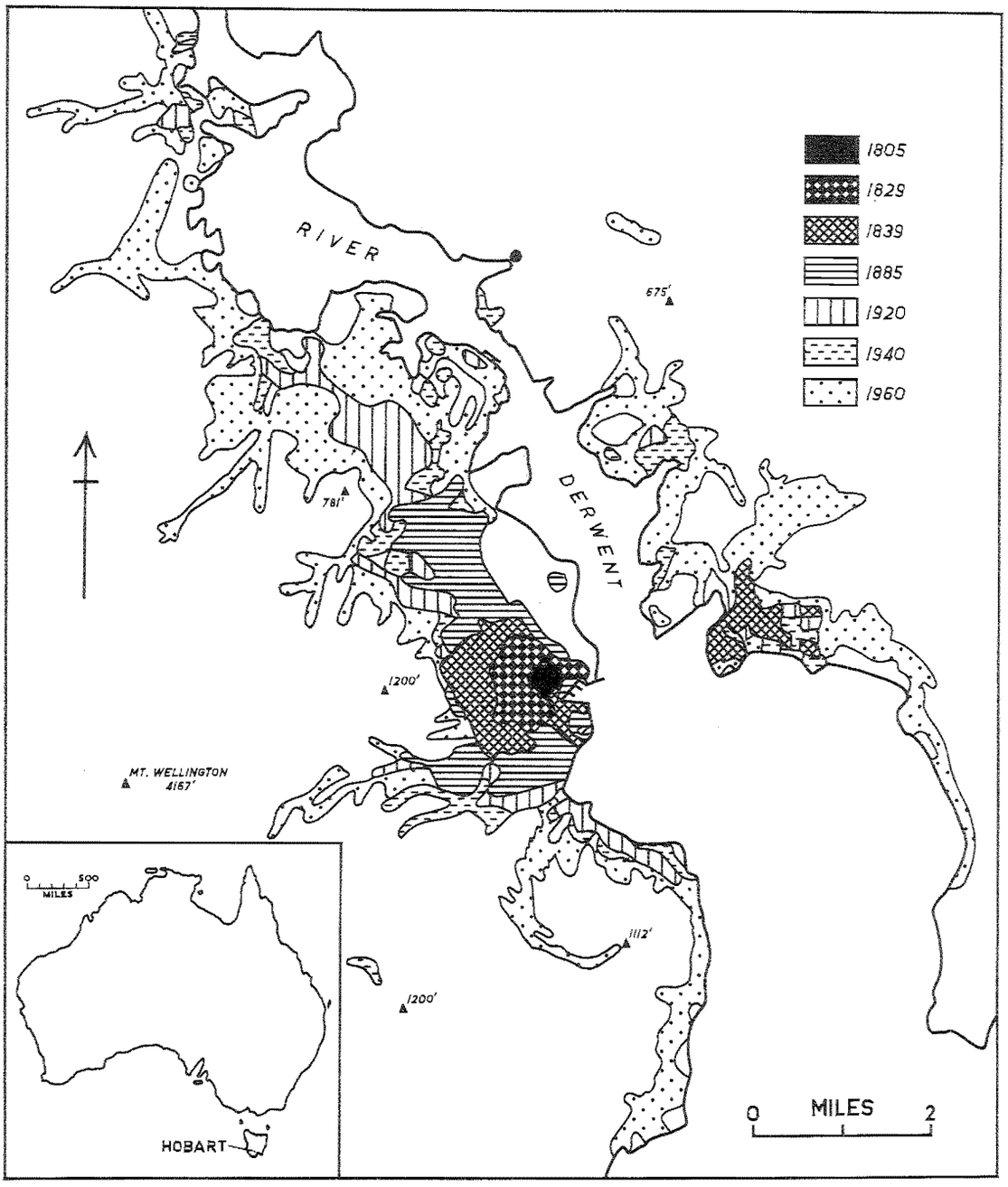

Fig. 10.29 The growth of Hobart along the drowned valley of the Derwent. The 1839 area on the eastern shore appears more important than its low-density occupation deserved.

four houses per acre, the lowest density obtained by Conzen for any of Alnwick's developmental periods[16] are almost entirely confined to the area of the colonial town, and a majority of these are single-storey structures. In any case the area occupied by colonial Hobart is not insignificant in relation to the whole, and since it is the zone of greatest admixture it has most to offer in the long view of growth and its processes. It should be clear that the approach to townscape analysis advanced above is sufficiently concerned with the detailed appraisal of building fabric to have its greatest value in areas of multi-period occupation: areas which exhibit Conzen's repletion and replacement. It is not, unfortunately, a method of investigation in which "laborious building-by-building survey can be dispensed with", nor should it be inherently responsible for one's "failing to see the town for its buildings".[17] While much of consequence in the body of urbanism lies in the more abstract realm of urban physiology, the visible urban anatomy is our present concern and it remains to examine further the concept of the city image in relation to Hobart.

City Images: Contemporary Hobart

Any mental picture of a city such as those suggested at the outset of this chapter will depend largely on "that quality....which gives it a high probability of evoking a strong image in any given observer": what Lynch calls "imageability".[18] He sees the environmental image as consisting of identity (distinction as a separate entity), structure (spatial relationships), and meaning (practical or emotional, and communicable), which in reality "always appear

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16 M.R.G. Conzen: Alnwick, Northumberland: A Study in Town-Plan Analysis, p. 53 (13)

17 A.E. Smailes: op. cit., p. 101. These quotations should not imply a lack of sympathy in this author for the consideration of buildings as a component of urban morphology since he previously stressed the significance of the third dimension in the variety of the urban scene.

18 K. Lynch: The Image of the City, p. 9. Cultural (i.e. human, social) qualities can contribute to the image as well as finite physical features, but their assessment is necessarily even more subjective and would require rigorous testing of the observers.

Fig. 10.30 Central and southern Hobart from Mt. Wellington, 1950. Sandy Bay is on the right centre; on the upper left the hills rise between suburban Dynnyrne and the flat depositional land used by the Hobart airport. Dolerite boulders in the foreground.

Fig. 10.31 Northern Hobart from Mt. Wellington, 1950. The flat industrial area of Moonah and Derwent Park, leading to the Electrolytic Zinc Co. at the river's edge, occupies the centre of the photograph. Risdon Cove and the site of initial settlement are across the river left of centre.

together" even if they can be abstracted as image components.[19] The imageable features of the central areas (approximately 2 1/2 x 1 1/2 miles) of three contrasting cities were defined by field survey and by interview of a small sample of residents. Of the three, Boston's character has much more in common with Hobart's than have Jersey City or Los Angeles. Hobart's images presented here depend mainly upon field assessment, but they include the informal reactions of interested visitors over several years.[20]

Although Lynch indicates that variation in the texture of the image may arise from the degree of an observer's familiarity with the environment, the images which are defined are those of residents. He wants to be able to use their images in future planning for the wider well-being of the inhabitants, but we might also entertain the possibility that there is a non-resident image the import of which may be narrower, but in relation to tourism, equally real. What then is the outsider's image and what the insider's? They both look at, if not see, the same landscape objects.

The visitor sees first of all an outstanding physical setting. Whether he comes by ship to within a block of the CBD or by road from the airport, the drowned estuary with well defined border of hills on the east and imposing backdrop of Mt. Wellington on the west will remind him of Vancouver, San Francisco or Wellington (in kind, if not degree), or will compare favourably with Sydney (not so readily encompassed) and more than favourably with the other capitals. If he ascends Mt. Wellington (4167 feet), as is likely, he will have the overviews shown in Figures 10.30 and 10.31, of a kind approached by only a few of the world's port-cities and by alpine settings such as Innsbruck's or Chamonix's. At this scale imageability is high. Back at sea level the image is of a port-town, of piers that look straight

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19 K. Lynch: op. cit., p. 8

20 To what extent they might represent "a series of public images each held by some significant number of citizens" (Lynch, p. 46) is not possible to say without much more extensive testing than could be undertaken at this time.

Fig. 10.32 Elizabeth Street Pier leads straight into the main street, with GPO tower at right, 1964. The tower of St. David's Cathedral is at left, the Hydro-Electric Commission offices overlook the Hobart Marine Board building in the centre. In the foreground the transom of Conrad's ship "Otago" awaits export to an oversea buyer.

Fig. 10.33 Mainly colonial warehouses occupied by the fruit and jam manufacturer and exporter H. Jones & Co. line Hunter Street (the former causeway) beyond Constitution and Victoria Docks, 1960. Apples for export are inspected on trucks at centre. At right foreground, rear perspective of a Georgian hotel (Howard), demolished 1964.

into the C.B.D. (Figure 10.32; more often vice versa) and of a port area defined by the Macquarie (formerly Old) and Prince's (formerly New) Wharves with their bordering colonial warehouses (Figure 10.33). The historical flavour is now tasted and it is but a short peregrination from the convict-built warehouses of Salamanca Place into Battery Point (Figure 10.34), surrounded now by a high proportion of Georgian architecture (Figure 10.35) and taking the full flavour of its distinctiveness in this Australian setting. If he then continues, as he will, to the landmark of St. George's Church, he is but a short distance from the western fault-scarp and a fall of some 60 or 70 feet from the dolerite of the Point to the Tertiary sediments of the depression running down into Sandy Bay (Figure 10.36). From this edge he can view the dolerite Mt. Nelson massif beyond, history (as readily observable) now being confined to the signal station site at the summit, and turning westward his line of sight takes in the hillside suburb of Dynnyrne beyond the southwestern corner of the colonial town, and behind South Hobart the larger bulk of the mountain (Figure 10.37). He may move to the slopes of Knocklofty, or to more northerly view-points in the Mt. Stuart area or beyond. Some of those sights will be memorable, but they will add little to the image of the city already formed. If he travels northward through the attenuated residential-commercial-industrial zone of mainly twentieth century derivation he will take in the mountain from other angles; local elevations and some pleasant foreshore settings, not the least notable being the outstanding peninsular industrial site of Cadbury's; and little that is repelling; but none of these is likely to supplant the images developed of the south and from above.

Are these the concepts of the local populace? Yes, and no. The physical pattern is the same, but two attitudes inevitably modify the more or less disinterested view: insularity and familiarity. The two are not unrelated. If the occasion demands, the resident Hobartian may express pride in his historic buildings, but of the less obvious examples he is often unaware. Even the better examples may be

Fig. 10.34 View across the eastern quarter of the city core to Prince's Wharf and Battery Point, 1958. Collins Street runs at the foot of the photograph, Elizabeth Street is near the right hand margin. (Don Stephens photo)

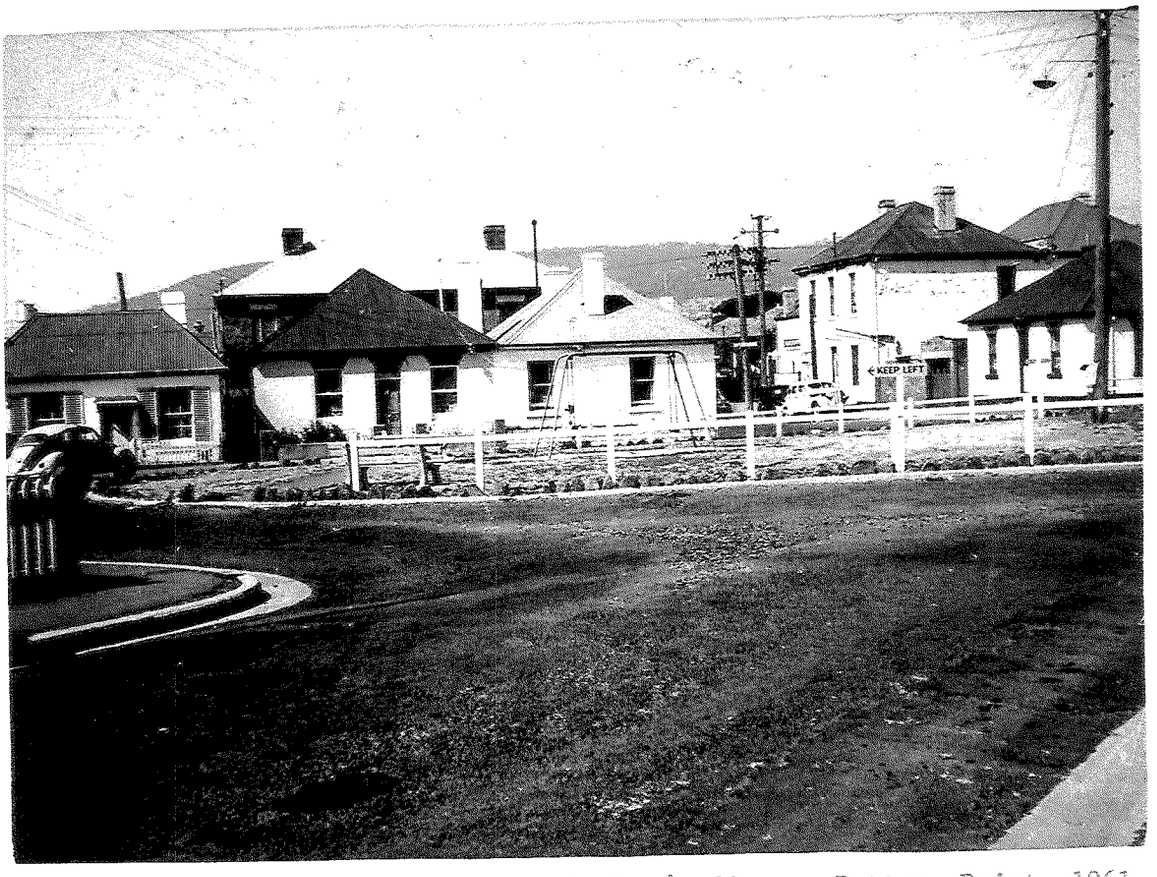

Fig. 10.35 Georgian cottages in Arthur's Circus, Battery Point, 1961. Probably the only colonial circus in Australia, developed in the late 1840s.

Fig. 10.36 Study Bay with pumice accumulation in the middle ground. View from the mountain ridge of Western Point, 1976.

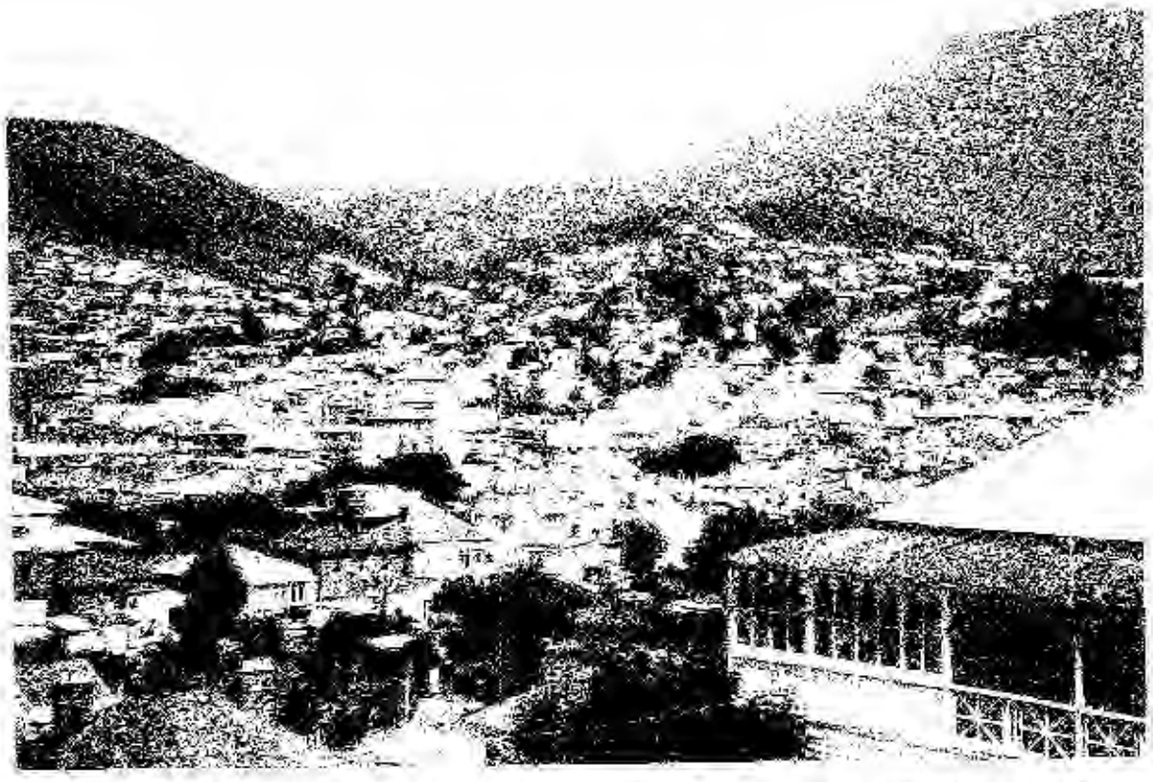

Fig. 10.37 Aerial view Study Bay (Chapter Harbor to Castaway Point and Study Point), looking by Dr. Wallington. From Harmony Point, 1966.

in conflict with a liking for change as an expression of progressive outlook, but while this is the genuine desire of some it may more generally reflect a defensive response to the charge of insularity: "backwater", "poor little Tasmania"! So, with no real community appreciation of historical values, with a spasmodic awareness of the aerial view, the dominant images are associations of water and hilly topography and the uses to which they may be put. This is neither surprising or unusual. Lynch's interviewers found that "the landscape features of the city: the vegetation or the water, were often noted with care and pleasure."[21]

The operative word in Hobart is, somewhat ill-defined, 'views'. What this means is a wide awareness of the effects of elevation on the scene from the kitchen window: the housewifely round is made endurable.[22] The awareness is of course translated into land values, and so finance may limit realisation of the generally acknowledged desirability of 'a view'. Nevertheless hill-sites are sufficiently numerous throughout the southern half of the metropolitan area to give a wide range of possibilities and few of the substantial majority who own their dwellings could not afford a limited view if that were their avowed objective. Most of the views include water, and the uses of water come next in general awareness. These include residential waterfront sites, the harbour as a port, and the estuary as a boating and swimming area. The image of the port-city is widely held, associated particularly (and justifiably) with the apple exports. The general use of the estuary for sailing and aquatic carnivals is driven home to all and sundry twice annually in the shape of the Hobart Regatta which 100,000 people are fancied regularly to attend (the first in 1838 was more exclusive),

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21 K. Lynch: op. cit., p. 44. It should be noted that Hobart is not any urbanist's idea of a garden city. While a few suburbs like Sandy Bay and Taroona are well served by evergreen native and deciduous exotic trees and shrubs, the central and inner streets and blocks are poorly vegetated.

22 The kitchen window is chosen advisedly. While not universal, the practice of building the kitchen in the front half of the house is very common in the hillside suburbs of post-war origin. The public room(s) share the privilege.

and the Sydney-Hobart ocean yacht race which draws some thousands to the docks where the competitors tie-up, and many more to their rooms-with-a-view of the estuary. These are the popular images of the city.

Image Components

It remains to enumerate a little more specifically which objects with physical form in the urban landscape attract the attention of its occupiers either because they assist movement and observation or because they impede them. It is not intended slavishly to follow Lynch's capable definition and systematisation of the elements comprising the city image, nor is interview data available to pronounce with sufficient generality on public response to a large number of elements. The views therefore reflect the writer's observations of the local scene, to some extent assisted by specific public and published comment and individual reactions. There is little point in avoiding Lynch's nomenclature: his elements consist of paths, edges, districts, nodes and landmarks. They are not individually new and alternatives have been used,[23] but they cover the field well.

Lines of access are the threads that tie the whole structure together, and with Hobart's attenuated form the important paths are few. Sandy Bay Road, Elizabeth Street - Main Road (New Town), and Brooker Highway lead north-south along the river orientation; the Tasman Highway leads east across the edge formed by the Derwent. Each is a major traffic artery, distinctive in direction and/or character[24] and no other paths are as clearly envisaged. Davey Street leading west past Mt. Wellington and south to the Huon valley, and Augusta Road serving New Town and Lenah Valley are second-order paths. They are being joined by the partly completed Regent Street - Churchill

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23 For instance, in Outrage and Counter-Attack (23, 24) terms such as agents, standard objects, and types of environment were used by Ian Nairn in his campaign against subtopia (and for worthwhile landscape images).

24 The old Main Road and the Brooker Highway are duplicate northern outlets, but while the former leads through successive ribbon shopping areas the latter has restricted access, four lanes and a higher maximum speed limit.

Avenue duplication of Sandy Bay Road. For those whose knowledge of the town structure is better developed the imagery contains more local paths which in the main lead to suburbs rather than through them to the hinterland. These are also shown in Figure 10.38 as secondary paths, though they are probably tertiary. They include: Montpelier Retreat (to Sandy Bay Road from the port area), Proctor's Road (to Dynnyrne), Nelson Road (to Mt. Nelson), Mt. Stuart Road (to that suburb), Risdon Road (to the Brooker Highway), Derwent Park Road (to industrial areas), and Main Road, Lindisfarne (to Lindisfarne). This leaves several quite important paths through the C.B.D., which are not environmentally very distinctive one from the other, but which have been given greater differentiation by one-way traffic restrictions for all or part of their length. Thus on the west of Elizabeth Street (two-way) Harrington leads north and Murray south, and on the east Argyle and Campbell do the same, respectively. Both these pairs and Macquarie and Davey leading to southwestern suburbs illustrate an important point made by Lynch: that unaligned paths, subtle curves, changes from parallel to perpendicular can cause weakening of images, loss of direction and even, for some, confusion of their total map of the town.[25] Piccadilly and Regent Street curving away in London achieve just this kind of indistinctiveness and indecision, and so (in the writer's experience) do Bambury and Woodstock Roads in Oxford, by gradually merging. Confinement of origin and destination to one set pattern undoubtedly assists the clarity of image in such cases.

The outstanding edge is the Derwent estuary, accented by its one crossing point, once unusual (a floating bridge), since 1964 striking (high concrete arch, strip-illuminated at night). Other edges are less obvious, but several are quite clear. The domain is one, Forest Road in West Hobart follows another, the steep rise to Davey Street from the valley of the Sandy Bay Rivulet involves a third.

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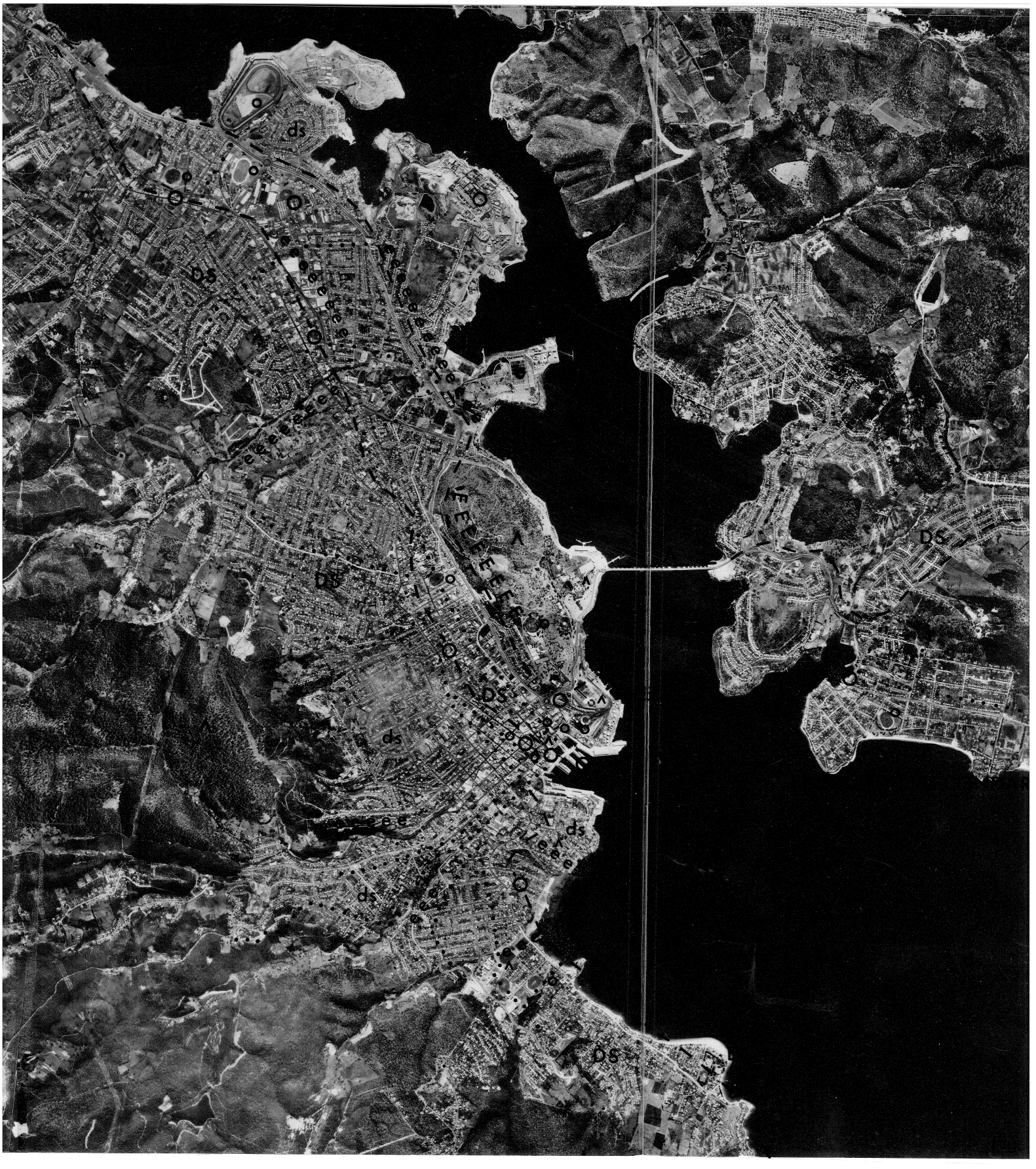
25 K. Lynch: op. cit., p. 56



Bath Street, Battery Point is lower, but in the western sun the edge of the scarp slope stands out with Mediterranean intensity. Scarps are always potential barriers, but paths may also be edges. Thus as well as being an edge for pedestrians the Brooker Highway is in part a general edge between the main northern residential areas on the west and the industrial foreshore to the east. The desultorily trafficked railway line is in general inconspicuous and its image negative, but in this same industrial vicinity flat land and level crossings cause it to share in the scene. There is evidence that for some people fairly insignificant Mt. Stuart Road marks the boundary between northern and southern suburbs despite its junction with Elizabeth Street being adjacent to the North Hobart post office. Albert Road, Moonah represents the end of the city for some, the nearby New Town Creek for others. Northern residents may feel differently, perhaps depending on whether they are pro- or con- the City of Glenorchy as a separate entity from the City of Hobart.

Nodes are points of concentration, points of convergence, cores. It is interesting that for central Boston Lynch shows seventeen, for Los Angeles two. The difference derives from most of his nodes being traffic junctions and breaks in lines of transport. Los Angeles' extravagant freeway system reduces junctions to a minimum. In Hobart the only major junction is the Railway roundabout where eastern and northern traffic meet. The railway station itself is a minor node owing to limited use. The main Hobart nodes are the shopping centres: the central city block, North Hobart, Moonah, Glenorchy, Sandy Bay and Bellerive. All these become foci for districts. District headquarters sports grounds are seen as minor nodes, providing much convergence irregularly. Although Lynch regards most public buildings as landmarks rather than nodes (whether or not they are particularly prominent visually), the scale is such in Hobart that a few individual buildings can fairly be defined as secondary points of concentration as well as of reference, largely relating to breadth of community use. The general hospital, the City Hall, and the public library are so regarded.

On the other hand the G.P.O.tower, the cenotaph and St. David's Cathedral are designated landmarks. They are visually conspicuous but because of more restricted association or duplication elsewhere in the city are something less than nodes. Few other man-made landmarks exist. Quite the most notable is the Tasman Bridge, well in advance of St. George's Church and the University. Generally, the major landmarks are the hills: Mt. Nelson, Knocklofty, the Domain, Mt. Direction, and Mt. Wellington dwarfing all.

There is a strong inclination to label all clearly named suburbs as "districts" in this assessment. Informal investigation shows that even as small a city as Hobart can provide considerable discrepancy and overlap among its inhabitants' images of major component areas (rather than points or routes). District centres are therefore shown in Figure 10.38 rather than multiple or combined district boundaries. Districts are seen as composite features, and socio-economic factors are compounded with physical characteristics of topography and appearance. Sandy Bay is probably the best known district, its clarity of image assisted by beaches which attract non-residents, and quality housing which arouses pride or envy, as so often with social overtones.[26] Even so, this image is essentially of Lower Sandy Bay, its poor relation nearer the city terminating at the University edge. By contrast the increasingly extensive suburban developments across the river are known widely as "the Eastern Shore". In the north the isolated suburb of Risdon Vale developed around the city's new gaol has some claim to a distinctive image.

Although commercially an extension of the C.B.D., North Hobart is socially distinctive with many southern European migrants among its residents, and perhaps a clearer image than West or South Hobart.

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26 For whatever reasons, there is also a greater awareness in this area of possible threats to the status quo. Many hundreds of objections were recently lodged with the City Council against zoning for flats in a substantial area of the district. Impeded views, traffic congestion, depreciated values were the kinds of reasons for objection. More visually, the erection of multi-storey apartments seaward of St. George's on Battery Point received wide criticism, though the inevitability of the trend is recognised.

The New Town - Mt. Stuart area has a clear core in the large and once leading residences along Augusta Road, but the boundaries are blurred and only one image may result. This effect is for most people heightened in relation to the northern suburbs. There is little to distinguish Moonah from Glenorchy either physically or culturally, and it is likely that the government housing area of Goodwood is the most clearly imaged sub-section. Warrane on the eastern shore for the same reason, coupled with delinquency and location on the main eastern outlet is more distinctive in the public mind than Lindisfarne or Bellerive.

Images of Transient Phenomena

One kind of image which was not a concern in Lynch's work deserves attention. It is the image which is produced, widely and even traumatically, by essentially physical phenomena. How long the image lasts is difficult to say, but in the public view of a city as an entity and even of some of its parts, such an image may be at least as important as those which relate to squares or buildings that do not after all reappear when pulled down or remade. The smog of Los Angeles is an image which that city would love to project elsewhere. For how long now, we may ask (following events of the mid-sixties), will Florence be identified with flood as well as art, Detroit with racial disturbance in addition to automobiles?

Hobart has experienced three climatic influences which are part of its present city image. The first is minor but recurrent, the others major but very occasional. In a climate that rarely provides extremes any disruption of the even tenor of existence is notable. A winter fog which accumulates in the middle valley of the Derwent drains down stream from Bridgewater in the early morning and fills much of the hill-bordered estuary as it moves through the urban area (Figure 10.39). This feature is known as the 'Bridgewater Jerry' and usually passes nearer the eastern shore, sometimes obscuring visibility for traffic crossing the river and in areas such as Rosny Point. The fog is dissipated by warming sun

Fig. 10.39 Winter morning fog channels down the Derwent estuary behind Battery Point. June, 1966.

Fig. 10.40 Confined course of the Hobart Rivulet between Harrington and Barrack Streets, 1966.

and rarely lasts beyond mid-morning.

Less expected, much more disruptive, and strongly remembered are flood and fire. In April 1960 a steady rainfall of 7 1/2 inches in three days on the steep Wellington catchment provided more run-off than the Hobart Rivulet could contain. The original course of the stream had been encroached upon by central premises (Figure 10.40) and the lower sections of Collins and Liverpool Streets were flooded (Figure 10.41). Remedial measures have included the construction of trash racks and the widening of the restrictive Harrington Street bridge (Figure 10.42) but a scheme to divert the rivulet waters underground away from the C.B.D. to a Sandy Bay outlet was thought too costly to implement. Thus the low-lying eastern parts of the city centre remain potentially inundatable as they were a century and a half ago. One or two other small urban streams, notably the New Town Rivulet, are subject to more frequent flooding, but damage is relatively slight compared with that associated with high density commercial buildings and stock.

Quite the most devastating image which Hobart has added to its repertoire in recent times comes as a post-script to the period generally covered. It does, however, illustrate that the pleasure afforded by panoramic views and bushland surroundings may occasionally demand a higher price than the costs of water supply and sewerage for low density occupance in difficult topography and a dolerite sub-surface. On February 7, 1967 (known now as 'Black Tuesday') a midday temperature of 102°F, Relative Humidity of 13 percent, and 23 northerly wind gusts of 40-65 knots between 1300 and 1400 hours spread bushfires widely through southeastern Tasmania. Rainfall of 237 points November-January (average 647) had left vegetation highly receptive; fire spread across the whole eastern flank of Mt. Wellington to burn 400 urban and peri-urban houses (Figure 10.43) and take many lives. The small valleys of the piedmont were badly hit and 'mountain' suburbs such as Fernitree and Ridgeway recorded some of the highest rates of destruction. There was no conclusive

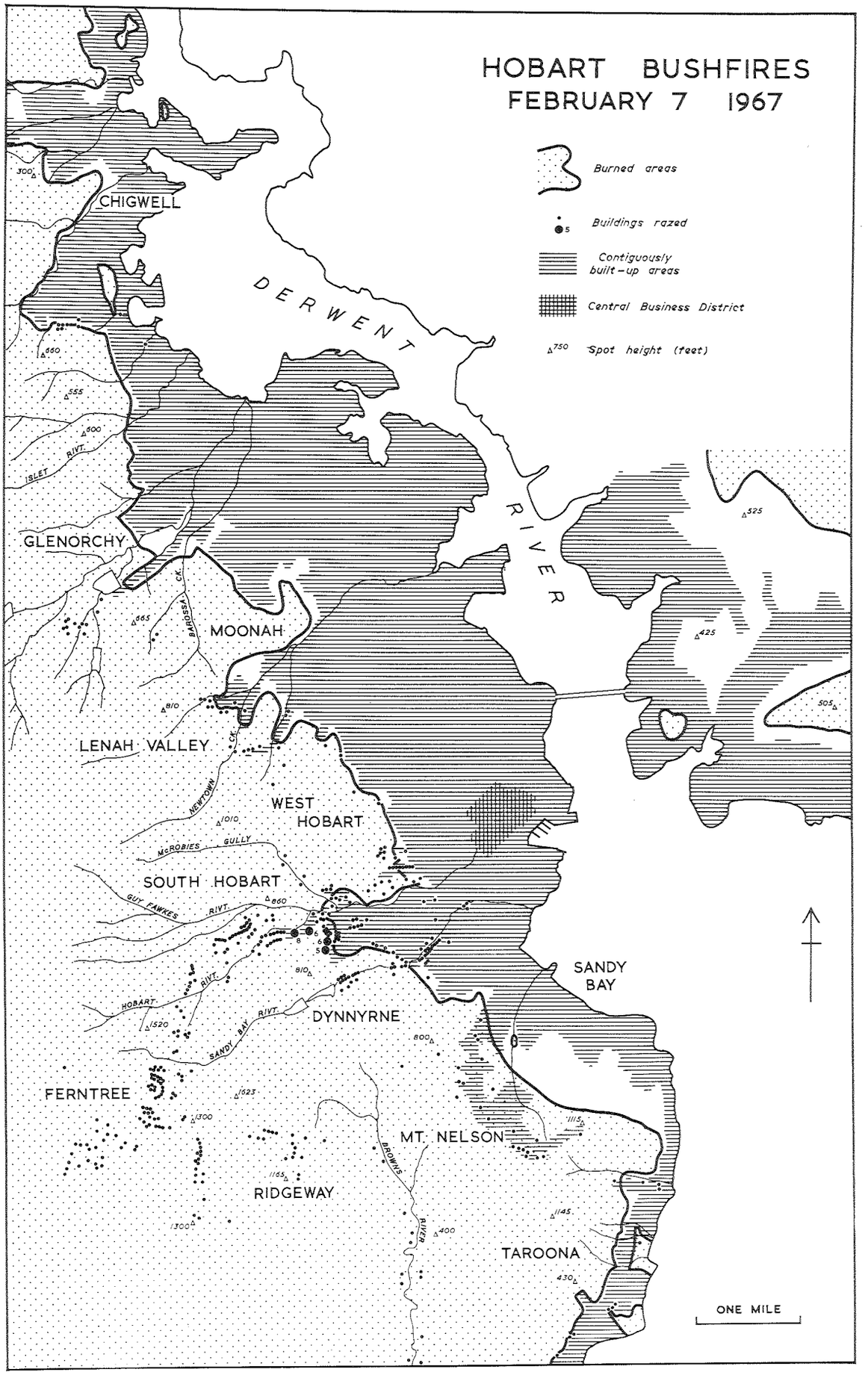

Fig. 10.43 Distribution of areas burned and buildings destroyed in Hobart and environs by the summer bushfires of 1967.

evidence that the uphill movement of fires produced more damage overall on the ridges than in the valleys; random combinations of building materials, water pressure, wind gusts, owner-occupance, and fire-fighting efficiency seemed to produce random effects (Figures 10.44 and 10.45). Flying sparks and cinders brought about the destruction of three houses only 5000 feet from the G.P.O., and in Berriedale in the north and Taroona in the south fire demolished buildings on the main road and crossed it to reach the Derwent shore. Examination of Figure 10.43 suggests that if the strong northerly winds had persisted after about 1500 hours the concentrated destruction in the South Hobart vicinity is likely to have been extended right through the Sandy Bay residential area. In the whole urbanised zone half the buildings burned lay between the 200 and 600-foot contours, 42 were between 600 and 800 feet, 38 between 1000 and 1200 feet, and 44 between 1400 and 1600 feet.[27]

Although the western ravined areas of a city the size of Los Angeles have experienced bushfire destruction in recent times, the Hobart experience seems to indicate inter-relationships among smallness of city size, irregularities of site, inadequacy of preventative measures. There is more than a suggestion that either physical site is overrun by the urban form to the extent that natural disasters touch only a fraction of the large city and its image, or else that external influences are sufficiently restrictive to leave the site as a major influence in a small-city image. Neither of these possibilities is unrelated to the extent of townscape preservation, the development of property values, or the changing functional structure.

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27 A fuller account of the fire circumstances is given in R.J. Solomon and A.R. Dell (25).

Fig. 10.44 Burnt slope between Salvator Road (valley) and Forest Road (ridge), West Hobart. The chimney of one destroyed house stands at the foot of the slope. The white, two-storey colonial house was barely saved.

Fig. 10.45 Row of razed houses, Dynnyrne, in Waterworks Road near Proctor's Road. Fire swept down the valley of the Sandy Bay Rivulet (at rear) on this locality just over a mile from the CBD.

References Chapter 10

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Chapter 11

Functional Units and Functional Zones

The purpose of this chapter is to examine the structure and arrangement of those working parts of the city which lay (and lie) behind its mid-twentieth century facade. Hobart in the 1950s and 1960s occupied several times its area of a century earlier, so that it is not practicable to examine the whole city with the same intensity as the colonial town was analysed in Chapter 3. To enable comparison and to follow processes (in Part 4) the inner area coinciding with colonial Hobart is subjected to similar scrutiny of its functional units as for 1847; the sub-urban areas beyond are considered at the more general level of functional dominance and functional zones.

Distribution of Functional Units 1954

The valuation lists for urban property in 1954 (1) provide data on uses and activities which closely resemble those of 1847.[1] The detail of functions is a little greater, including the names of firms and companies the nature of whose business is better known than the precise activities of their colonial predecessors. However, for distributional purposes any additional detail has been fitted into the 1847 classification, to the extent that it has been increased by only one category of function. Public utilities are designated to accommodate the not very numerous properties which are operated by public authorities to serve essentially non-social needs, at least by comparison with hospitals, schools and libraries: electricity substations, transport depots, weighbridges, car parks.

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1 So too does the 1962 assessment, but while the 1954 lists cover 257 pages of single-line entries, the later format was changed to that of a single card for each property. It was decided that the task of compiling data from upwards of 20,000 filed cards was not justified by their greater proximity to the present in relation to the whole period of the study.

The same 19 central blocks as were plotted in Figure 3.1 are shown in Figure 11.1 with their functional units of 1954. It is clear that Liverpool and Elizabeth Streets maintained their axial status even though the reduction of the shop-and-house combination in favour of shops or offices lessens the visual impact of the map distribution. Sections of Elizabeth Street north of Bathurst show the shop-house situation much as it was over considerably greater frontage. At the same time, the wider use of the single symbol does not mean that many central premises had been reduced to one storey, only that the property was assessed as a single function. Several symbols in line behind the frontage represent successive storeys with multiple occupiers. It can be seen that in 1954 these buildings were few, and most of the central functions were within one floor of the street. Not many were still to be found in the interiors of blocks, and the high density of small functions along Cat and Fiddle Alley in the main block had given way to the wholesale division of a single firm.

Table 11.A

Functional Proportions of Block Total Valuations 1954

Block No. (Fig. 2.5)	No. Units	Total Valuation (£)	Shops & Banks	Hotels	Warehouses	Total Commerce	Offices	Factories	Public Bldgs. & Halls	Residential
65	57	2,719	8.8	-	20.7	29.5	-	1.5	1.1	66.8
66	37	2,608	3.3	-	-	3.3	-	25.9	2.2	68.6
67	37	4,875	15.1	-	9.0	24.1	6.5	43.9	1.3	23.2
68	131	16,228	34.8	15.9	6.5	57.2	6.2	3.7	15.2	17.0
69	138	31,791	40.0	9.7	2.8	52.4	19.4	7.3	9.3	6.9
70	109	20,408	12.4	24.3	11.0	47.7	30.9	3.4	7.3	9.4
71	91	12,705	11.7	-	3.3	14.9	41.5	4.9	19.2	18.6
81	67	5,478	9.3	-	8.6	17.9	18.6	22.2	-	38.3
82	55	8,198	46.5	-	-	46.5	8.9	19.8	-	22.9
83	68	10,338	38.1	11.7	3.6	53.3	10.1	7.2	9.2	17.4
84	94	28,293	66.6	3.2	8.6	78.4	9.3	2.4	2.4	7.3
85	161	66,097	72.8	8.2	-	81.0	18.5	-	0.2	0.3
86	178	40,593	36.7	7.7	1.1	45.5	46.6	0.1	0.7	2.4
96	79	9,430	7.4	-	3.2	10.5	0.9	35.6	5.0	43.0
97	75	9,725	15.1	30.6	2.6	48.3	5.6	18.6	-	26.3
98	74	11,338	52.6	-	0.9	53.5	6.6	28.3	-	11.6
99	62	19,674	51.1	14.5	12.4	78.0	5.6	2.3	-	4.1
100	113	33,602	51.5	15.1	8.4	75.0	19.6	0.8	3.1	0.7
101	64	19,420	24.1	-	0.1	24.3	38.2	14.7	21.5	0.5

Source: Assessment Roll 1954/55 (1)

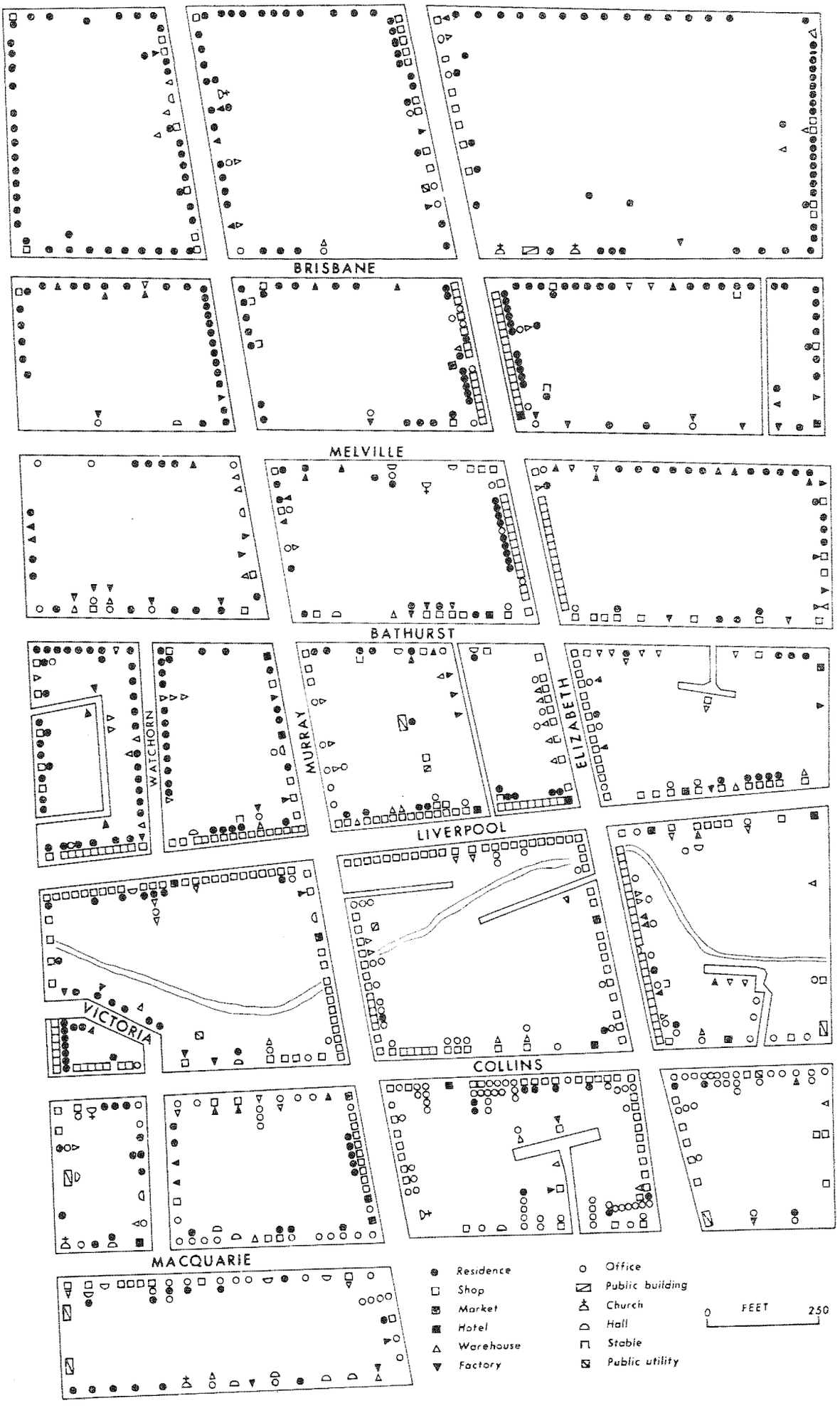

Fig. 11.1 Distribution of functional units 1954 in nineteen inner blocks (Assessment Roll, 1954/55)

The share of the major functions in the property valuations of the blocks in Figure 11.1 is indicated in Table 11.A. Seven blocks now held more than 40 percent of their property value in shopping and banking premises (two in 1847), and in 12 blocks their share was greater than the residential proportion of the block total (only four in 1847). Despite this increased area of retail provision, only eight central city blocks could claim more than half their value of property in commercial functions of all kinds, compared with seven in 1847. However, the level of commercial penetration was in some instances very high, reaching 75 percent in four blocks and a maximum of 81 percent in the main block (Block 85) -- 20 percent above the maximum commercial share of block property 107 years before. Furthermore, a significant proportion of offices are engaged in activities such as insurance which in their commercial orientation are finely divided from retailing activities involving goods, so that second-ranking Block 86, with equal proportions of property in commerce and in offices as defined, was more commercially developed than at first appears. The average commercial share of the six most highly values blocks was 63.3 percent and of the six central blocks with highest commercial proportion 70.5 percent. The equivalent figures for 1847 were respectively 53.8 and 57.4 percent, leaving no doubt of the relatively more important place of commerce in the central area. That this is a growth process by area occupied has long since been recognised, and can be clearly seen, for example, in Bartholomew's land use maps of central Louisville in 1884, 1930 and 1953 (2).

Commercial property both outnumbered and outvalued other major functions in some central blocks, but only a few blocks away from the core (as north of Melville Street in Figure 11.1) the residential function quite rapidly assumed a numerically dominant position, and was only a little less dominant in value. Thus we find in Table 11.B that more than half the 121 blocks[2] containing

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2 There are 122 numbered blocks on the index map, Figure 2.5. Those additional to the 110 assessed blocks of 1847 include reclaimed land near the waterfront (Blocks 88, 117, 118) and completion areas in the north (Blocks 77, 84) and on Battery Point (Blocks 54, 61, 119-122). Block 75, which once had separate identity as a market and storage area has, in the shape of gardens, been linked to Parliament House in Block 73 and carried no assessment in 1954.

were to be found Cox Bros.' department store together with hardware-based Cane's and drapery-based Mather's, while to its east in Block 99 Maple's furnishing, Harris and Marsh's hardware, and Palfreyman's clothing shops had multiple departments without covering the whole range of commodities from consumer durables to foodstuffs. The same nine blocks of Table 11.A (also Figure 11.1) contained 42.3 percent of inner area shop units and 68.8 percent of their total value, which underlines the relative importance of the central shops. In fact Block 85 alone held 28.4 percent of all inner shop values in 65 units or 8.7 percent of the total number. This concentration of retailing property was more than 2 1/2 times that of any other city block.

Since 1954 its dominant position has almost certainly increased, owing to three major developments. The Liverpool Street store of Brownell's was amalgamated with Johnston and Miller's Murray Street store, the whole becoming part of Myer's, Australia's largest single retailer; the leading Tasmanian retailer, Fitzgerald's of Collins Street, absorbed the Elizabeth Street store of Goodwill's; and the once congested lane of Cat and Fiddle Alley was completely redeveloped as an arcade by the hardware wholesaler and retailer Charles Davis (Figure 11.2). Other developments followed in the first few years of the 1960s, most notably the expansion of the Davis premises and of the Hobart link in the expanding Coles' retail chain. An important accompaniment of the mergers and consequent developments was the provision of internal access. Inter-communication between several leading occupiers which had already existed was extended to adjoining shops to give unusual and probably unique[5] walk-through circulation from any street frontage to any other.

Inner Area Functional Structure

While the very core of Hobart's functional structure exhibited

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5 Personal observation of geographer-planning consultant Harold M. Mayer of the University of Chicago.

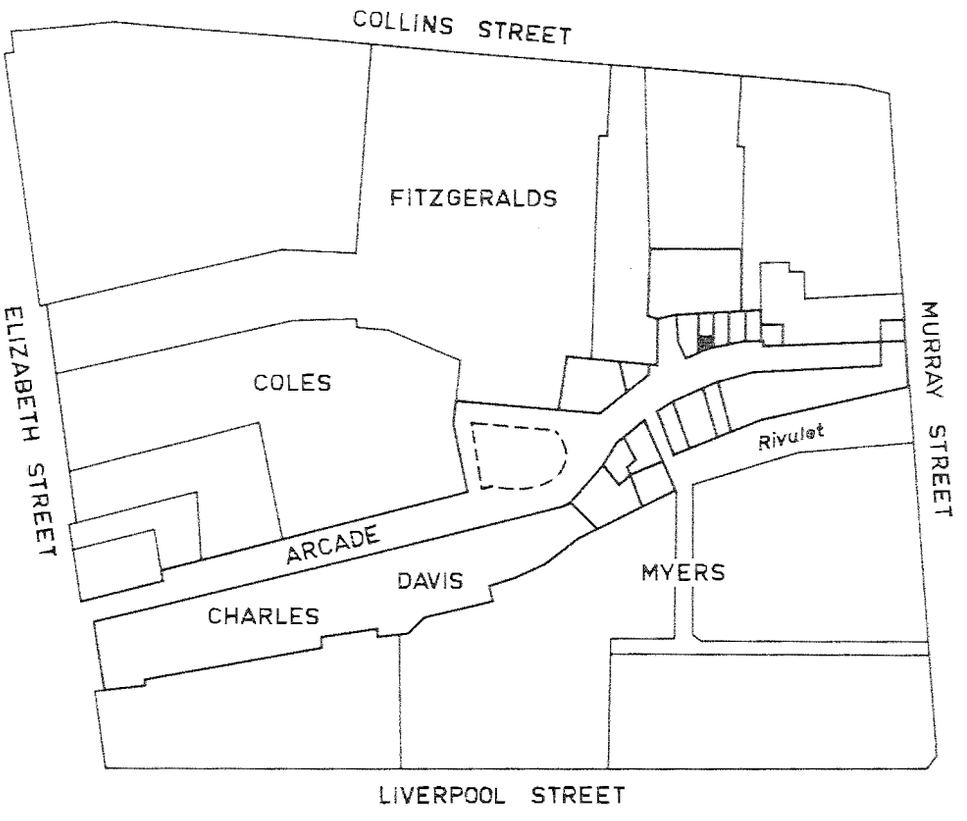
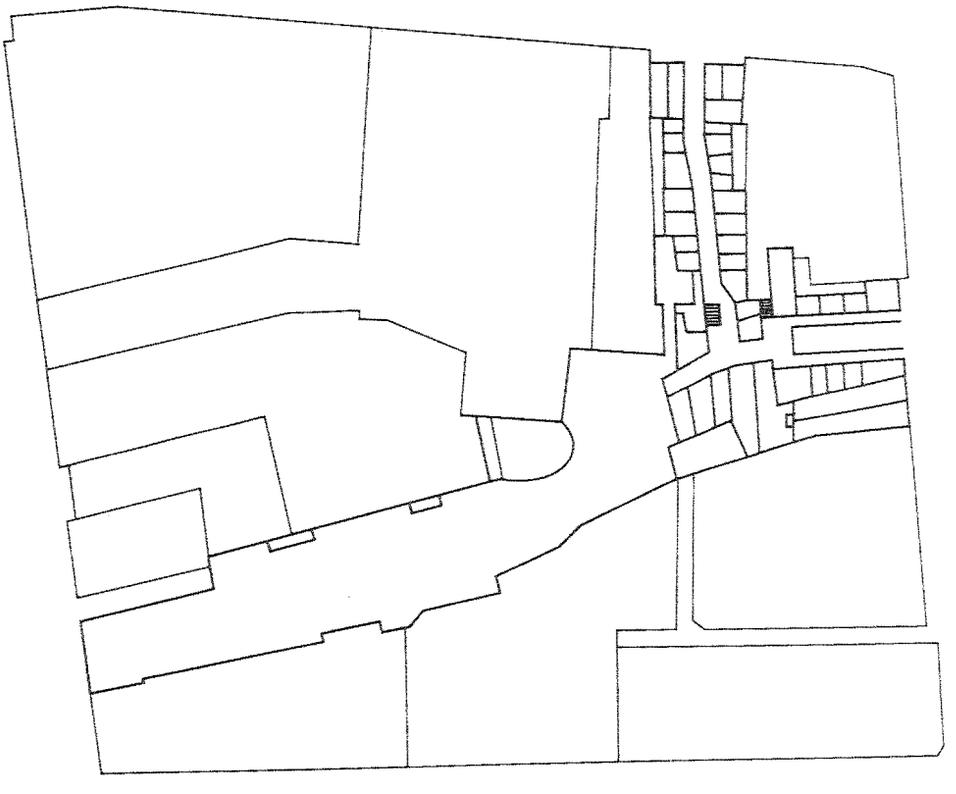


Fig. 11.2 Main block re-development in the early 1960s centred on reconstruction of the nineteenth century Cat and Fiddle Alley between Elizabeth and Murray Streets. Ground level plan above, first floor below (Mercury publication).



in 1954 a notable consolidation of its shopping nodality of a century earlier, there were both similarities and differences among other components of the inner area. In the shopping sector itself the less than 50 percent increase in unit numbers left this function with just under 20 percent of all inner property valuation, an increase of 3.5 percent over the 1847 share. Warehouses, on the other hand, maintained an almost six percent share of inner property while more than trebling in number. Many of these in 1954 were associated with the larger retail stores, and the general proliferation of consumer commodities in response to more specialised and less fundamental demand (or vice versa?) provided their raison d'etre. The position of hotels in 1954 (Table 11.D) in part paralleled the retail shop situation. The units were larger and much more

Table 11.D

Summary of Hobart Functional Characteristics in 1954

Item	Residences	Shops	Hotels	Warehouses	Offices	Factories	Halls	Public Bldgs.	Total*
No of units	4865	751	52	222	638	242	49	72	7,164
Value (£)	290,328	164,515	68,984	48,816	107,915	59,527	17,514	44,559	837.269
Average Value (£)	59.7	219.1	1.326.6	219.9	169.1	247.6	357.4	618.9	116.9
% all property value	34.7	19.6	8.2	5.8	12.9	7.1	2.1	5.3	100.0

* 11 Banks, 21 Churches, 18 public utilities, 12 stables and 211 pieces of land representing 4.2 percent of all property value are included in this column (see Appendix III).

Source: Assessment Roll 1954/55

valuable, but by comparison with the taverns of 1847, respectably few. There were no concentrations of the earlier order, the maximum number in any block being three, and in those of the centre if not further afield the residential aspect of the enterprise had presumably shown a marked increase. The hotels were even more highly assessed than banks,

and many times in excess of warehouses and factories which had rated rather higher in the colonial town.

Quite the most striking functional development revealed in the 1954 structure was the real advent of business offices, which, as will be seen in Part 4, is not only a twentieth century phenomenon. Their 20-fold increase in number indicates the arrival of personal, professional and business administrative services on the functional scene at a scale quite foreign to mid-nineteenth century populations at large. That the individual premises involved were generally small is indicated by the low average valuation for the group, and even that figure is inflated by the valuation of a few multiple government offices as single entities. The office function is found in 46 of the 121 blocks in 1954, and only 14 of those carried more than 10 office units. One-fifth of all the offices were in Block 86, where they formed nearly half of the block valuation (Table 11.A; Figure 11.1). Their next greatest concentration was in the main block, though their value was overshadowed there by shopping dominance. In several other blocks offices comprised 30 or 40 percent of total property value (Appendix III) and Macquarie Street has clearly been the axis of that development. In Blocks 48, 49, 70, 71, 86 and 101 offices are a major component, and if the Public Buildings and other government offices in Block 87 were classified as offices rather than public buildings a substantial and unbroken office strip would be indicated by the data, as it is on the ground. Medical rooms (as in Sydney's Macquarie Street) and legal offices are prominent elements overall.

Of the remaining non-residential functions making up the inner city in 1954, factories were the most numerous. The increased sophistication of society and technology was duly represented in the absence of slaughterhouses and water mills, and the presence of motor body-works, but many of the factories were workshops of small size, sometimes directly associated with retail outlets and involving the tailoring of clothes, the fabrication of furniture and the manufacture of bread and cordials. Such an association of light consumer industry

with an inner city area of substantially residential and commercial character is in line with the practical findings and theoretical expectations of spatial analysts, whether economists or geographers (4, 5, 6), and the one major industry of the area had special relationships which made its location both logical and profitable. This was (and is) the fruit processing firm of H. Jones & Co., located beside Macquarie Wharf since its foundation as a purely jam making concern in 1861 (see Figure 10.33). Since the raw materials come by road from southern Tasmania, the site has adequate space for transport movement, and most of the products are shipped to interstate and oversea markets, the plant suffers little from the diseconomies of congestion or inaccessibility which might be expected in such a central location. In fact, the firm is near the centre, but in a peripheral position at the water's edge, which largely avoids the problems often associated with being in the centre. Apart from a foundry, a few sawmills and boat-building on Battery Point the larger, noisier or more noisome of Hobart's manufacturing plants are in areas beyond the inner zone and will be examined in that context.

Banks, halls, churches, public buildings and utilities were unremarkable but important components of the functional whole in 1954. It is possibly surprising that only four banks had been added to the seven of 1847, but this is a function which keeps fairly close to the consumer and branch decentralisation in pace with suburban growth prevents too heavy a load on the central services while maximising public access and convenience.[6] Churches were not assessed in 1847 and although they accounted for a mere 0.57 percent of the 1954 valuation their average of £229.1 based on a concessional rate placed them ahead of shops and warehouses and little behind factories, reflecting doubtless their architectural and landed worth rather than any innate desirability for rental purposes. The presence of 49 halls and like buildings represented a considerable increase in this provision, but given the expanded population, the growth in public as against private

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6 This situation is well illustrated in E.M. Flesselles: Banking Potential in the Outer Metropolitan Area of Sydney (7).

entertainment (television was yet to reach this outpost of civilisation), and the means of access to the centre by a larger population than could reside within it, the number was not striking. The average valuation of ₧357.4 may seem rather high when some of the less imposing shells of inner suburbia are considered, but the central cinemas represented high capital value and contributed strongly to the total for the group. The public utility average of ₧388.5 also seems high for an unexciting range of functions, but transport depots, for instance, occupied large areas of land in near-central positions and a few (such as substations) took up smaller but top-quality sites even within the leading blocks. In all, these uses accounted for 0.84 percent of inner area property value.

Governmental property was assessed at a reduced rate compared with other land uses, so the importance of public buildings as measured by annual value allocation is under-stated. Despite the importance of government in society and governmental symbols in the townscape of colonial Hobart the increasing complexities of administrative and social structure coupled with available land on which to contain them saw a doubling of public buildings in the inner area of 1954. Even the concessional rate left these properties behind only banks and hotels in average value, and despite it the public buildings share of total property was 5.3 percent, a little above the 1847 share. Schools, like churches, were well dispersed, but the public school in Block 25 accounted for 48 percent of block value, and in Block 42 a complex of Catholic schools represented 66 percent of the total. Excepting only some wholly residential blocks, governmental buildings' 95.5 percent of Block 87 value was the most dominant position of one functional group for any block, though the apparently nominal ₧100 valuation of the valuable public space forming Franklin Square was conducive to this dominance. No such spaces remained in Block 109 adjacent, where the Custom House, Museum, and other public buildings accounted for 88 percent of total block value.

The presence of a dozen stables in the inner city in 1954 (including the third and fifth ranking blocks) at least disproves the contention of Australian mainland metropolitans that Hobart was always a one-horse town, though their average valuation of £26.6 does little to advance the image of the particular premises. Taken in relation to an average valuation of £51.1 for 211 unimproved allotments it substantiates the belief that the value of land committed to some form of use is less speculative than that for which a use has still to be found, though it must be realised that the assumed use of vacant land would rarely be horse stables.

Residential property was the main occupier of inner Hobart land in 1954 despite commercial and other functional growth since the time when that land had formed the whole urban area. The number of dwelling places was almost double that of colonial days, but their proportion of all functional units had fallen to the still high figure of 68 percent. The decline of residential values was relatively more marked and houses formed little more than one-third of the £837,000 valuation, 20 percent less than the 1847 proportion. More than 70 blocks had over half their property value in residences, and nearly the whole western half of the inner area was dominantly residential. This is best seen in Figure 11.3, which (as with Figure 3.4 for 1847) gives a composite pattern of major functional categories.

Functional Zones: The Inner City

There are several other features of inner distribution about which the map leaves us in no doubt. The first is the location of the commercial core (defined as shops, banks, hotels and warehouses), with four contiguous blocks having more than 75 percent property value in commercial uses, another five adjoining with over 50 percent commercial dominance, and surrounding these a further six blocks with more than 25 percent commercial component but less than 50 percent of any other main function. The second is the presence of an office cum public building zone along Macquarie Street and contiguous with

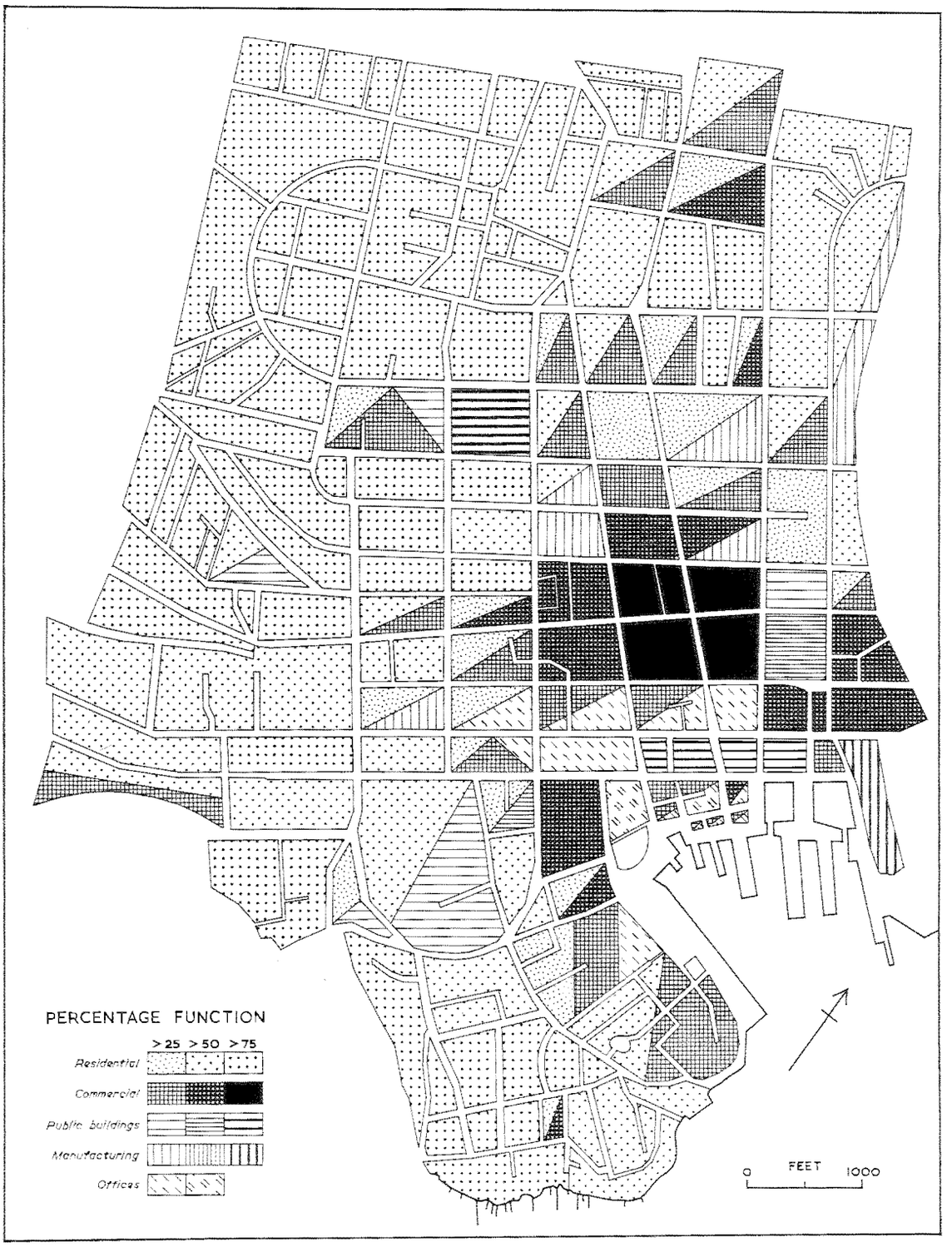

Fig. 11.3 Distribution of functions with more than 25 percent of block valuations, 1954 (Assessment Roll 1954/55).

the southeastern edge of the commercial core (Figure 11.5). And the third feature is that functional diversity was such in 1954 that a number of blocks had only one function with as much as 25 percent of total value, and alternatively several had three functions each with a greater than 25 percent share. Comparison with Figure 3.4 reminds us that in 1847 the concentration of functions was generally more pronounced, in that most blocks carried more than 50 percent of property in one functional category, but at the same time the degree of concentration in specific areas did not reach the level shown by the 1954 commercial core. In other words a crystallisation of central functional differentiation had occurred, but the active expansion of the business core into adjacent areas was providing a mixed pattern of functions which is usually identified as transitional land use.

The office and public building zone around the south and east of the commercial centre divided it from two lesser commercial zones, one centred on lower Collins Street with a dominant warehousing and secondary hotel element, and the other on the western side of the port, along Salamanca Place, with warehousing, some offices, and residences inland. The overall effect, therefore, does not quite achieve an expected encirclement of the port area by commercial uses, such a pattern being broken by the industry on Macquarie Wharf and the office area which provides a kind of insulation between the port warehousing zone and the shopping centre. However, there was clearly a close integration between port and town (Figure 11.4). Given the break which the port makes in the land area, the pattern of these central functions has some of the earmarks of concentricity: well defined commercial core surrounded by offices then warehouses on the south and east; mixed commercial-industrial-residential uses on the west and north. It is when we look further north along the Elizabeth Street axis that we find evidence of commercialism pushing outwards in sectoral fashion along the lines of access in the lower land between the Domain and the western piedmont.[7]

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7 It is hardly possible to look at Hobart's 1954 structure without some thought of its 1847 patterns, as will have become apparent, but any active discussion of its relationship to hypotheses of urban growth is more appropriate to Part 4.

Fig. 11.4 Embayment of port and central city in the early 1950s (Tas. Govt. Photo. Lab.).

Fig. 11.5 The Macquarie Street office and public buildings area. View northeast, 1963 (Rex Stephens photo).

The Port Function

Before turning to the outer urban areas of contemporary Hobart the highly significant inner zone of the port deserves attention. At the close of the 1950s its structure was considerably more advanced than our examination of the developing 1840s facility revealed, and yet, despite the small scale of the port area, the process of development was still in train. The marginal wharves of the 1840s had been supplemented by finger piers throughout the ensuing century and the longest of these, Ocean Pier, had extended along the line of Macquarie No. 1 (Figure 11.6) well beyond Queen's Pier, until it was destroyed by fire in 1948. In 1958/59 one million net tons of shipping entered the port for the first time since 1938/39, and the continuing trend for increasing traffic made consideration of improved facilities necessary. The basis of the developments under way and projected was, effectively, a return to the marginal wharf concept. The area that lent itself most to improvement without serious conflict of actual or intended use was Macquarie Point, and the trend of construction there is indicated by Figure 11.6. The northward splaying of Macquarie No. 2 facilitated access to the inner pier margin, and the wide aprons backing the wharf fronts and sheds permitted unrestricted use of mechanical loading aids, in particular fork-lift trucks. On the Battery Point side development space was also available, but less widely so without extension southward into slipways and residential interests. However, the area designated Princes Wharf No. 4 has in the 1960s been developed as the terminus for the new Sydney-Tasmania drive-on ferry service, and filling has given some foundation to the No. 5 proposal. On the western waterfront the finger piers have not yet been transformed into protruding marginal wharves resembling the Macquarie 2-3-4-5 area, but the contemporary limitations of finger piers of traditional proportions foreshadows this ultimate development.

Port provisions must, as with other functional constructions, be justified by the traffic available, or predictably so. The progressive rise in ship and cargo tonnages handled since World War II

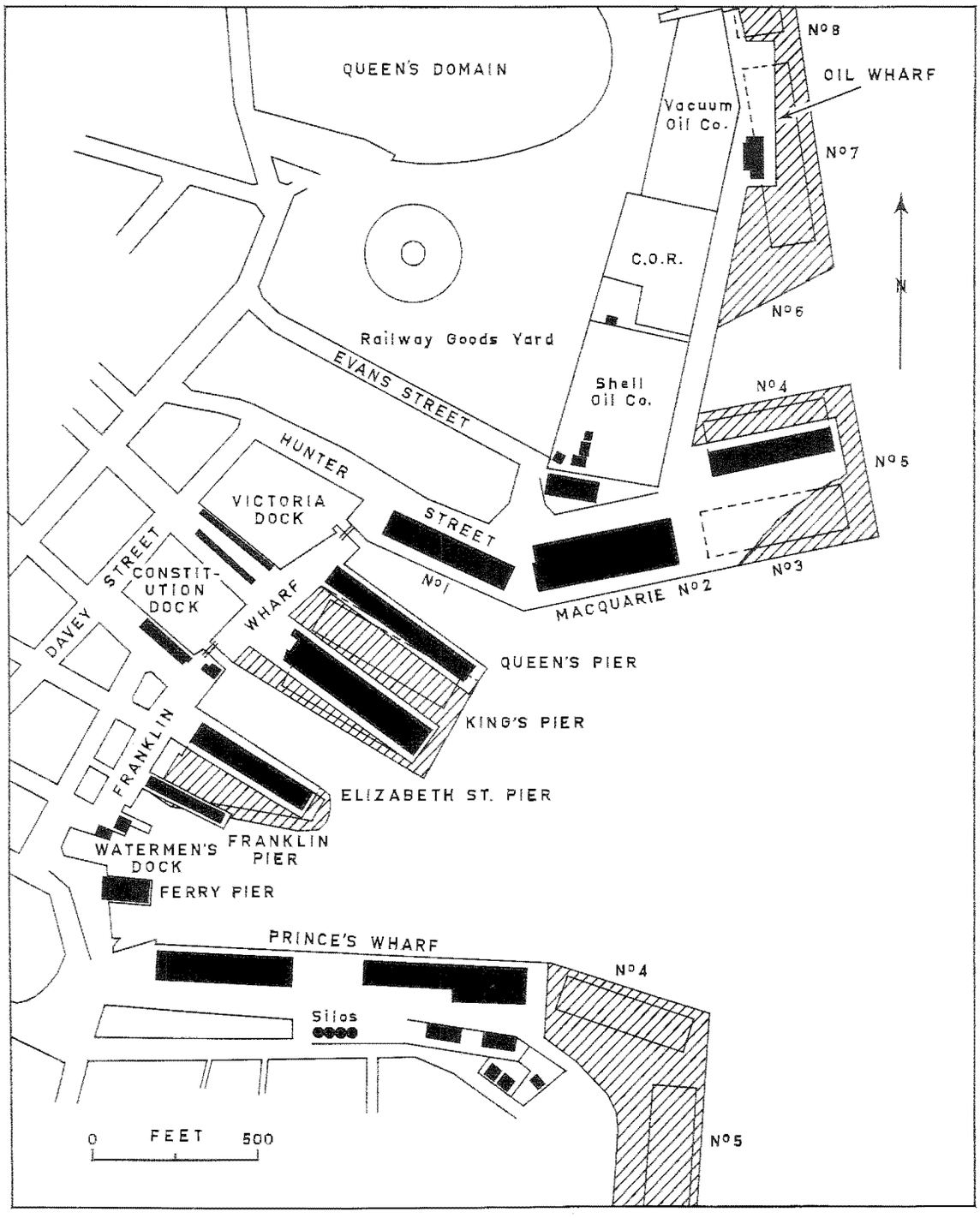

Fig. 11.6 Port structure and proposed developments, 1959. Storage sheds and other waterfront buildings shown in black. Franklin Pier was removed in 1960. The trend toward marginal wharfage by new constructions in the Macquarie area and planned amalgamation of existing piers from Franklin Wharf is indicated (GO/1123, Port of Hobart 1960, and Hobart Harbour proposed developments 1957, Hobart Marine Board).

certainly provided the general need and justification for development plans, but two characteristics of Hobart's commodity flow serve to qualify any unequivocal statement of the specific needs. First, the import-export traffic fell out of balance after World War II as a result of greatly increased demand for a few commodity groups; second, and more important, is the seasonal unbalance in shipping traffic.

In the five years 1956/57 - 1960/61 exports averaged 41 percent of total cargo handled by the port of Hobart — 2.64 of 6.45 million tons. Consumer goods and building materials accounted for much of the rise in imports over recent decades, reflecting population growth and widespread constructional activity in the domestic, commercial, industrial and public spheres. The composition of 1960/61 imports by value is shown in Table 11.E, indicating the chief needs of the community. Although the volume of exported goods grew rather less than the volume of imports there were some noteworthy increases in specific commodities, and the value of exports at the beginning of the 1960s remained higher than the value of the greater volume of imports. The quantity and value of several leading exports (notably

Table 11.E

Major Imports at Hobart 1960/61

Commodity	Value (£)	% Total	Commodity	Value (£)	% Total
Food, drink tobacco	11,384,350	29.12	Iron sheet	917,922	2.34
Clothing textiles	1,848,247	4.72	Tinned plate	433,394	1.10
Glass, China	272,021	0.69	Wire	394,191	1.00
Motor vehicles	2,161,280	5.52	Pipes	329,217	0.84
Petrol	1,140,468	2.91	Fertilisers	293,562	0.75
Other oils	934,093	2.38	Other chemicals	1,050,720	2.68
Paper, pulp	2,339,136	5.98	Ores, concentrates	3,432,757	8.78
Machinery	5,227,366	13,37			
			Total all imports	39,086,580	82.18

Source: Marine Board of Hobart: Annual Reports

newsprint, chocolate products, carbide) are not published, but Table 11.F lists the available data. It can be seen that there were new diversifying influences added to the old staples like wool and timber, some produced in the urban area, but as significant as this important development was the rôle of fresh fruit shipments in the port's trade.

The movement of apples and pears from the Huon Valley through the port of Hobart has been of particular significance since the last century. Britain has been the chief oversea recipient of Hobart's

Table 11.F

Major Exports from Hobart 1960/61

Commodity	Quantity	%	Value	%
Food, drink	?	?	14,433,446	33.53
Fresh fruit	176,041 tons	31.33	4,508,725	10.47
Processed fruit	10,776 "	1.91	1,431,482	3.32
Jams	2,938 "	0.52	513,815	1.19
Wool	4,900 "	0.87	2,838,183	6.59
Newsprint	c. 90,000 "	16.00	?	?
Zinc	107,879 "	19.20	10,502,933	24.40
Carbide	c. 3,000 "	0.53	?	?
Timber	10.7 mill s.ft.	?	705,887	1.63
Total all exports	561,731 tons		43,041,893	

Source: Marine Board of Hobart: Annual Reports

fruit exports since 1890, although significant quantities move to other northwest European destinations and a trade with Asian forelands is developing. The direction of 1960/61 fruit shipment is shown in Figure 11.7. For most of the period since World War I fruit exports accounted for more than 40 percent of annual export volume and around 20 percent of all trade. Although they did not increase at the same rate as all exports after World War II, the 3.93 million cases despatched in 1960/61 represented 31 percent of the year's record volume of outbound commodities. Most of this was shipped in the brief season March-May, the one period of the year when bustle

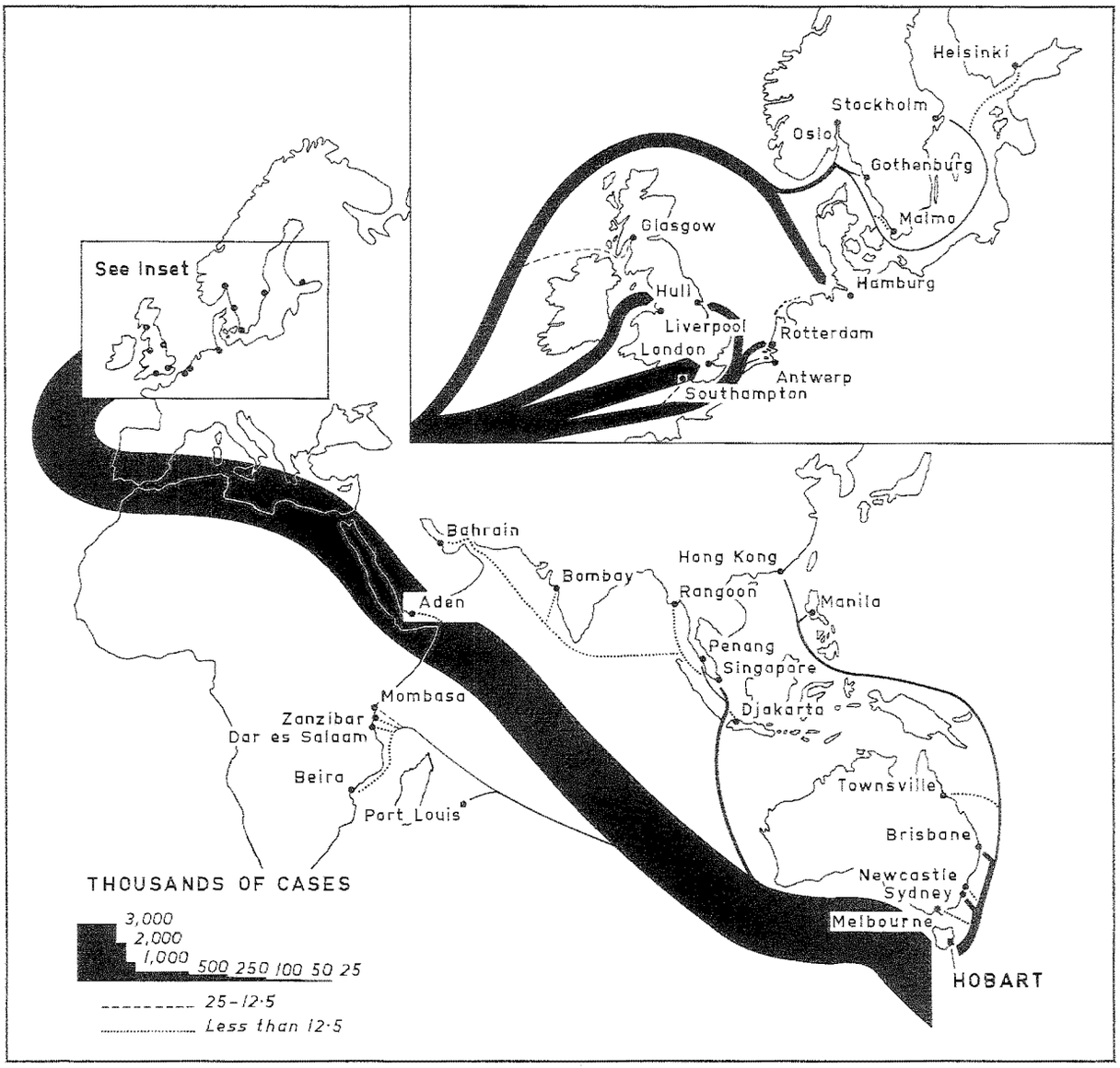

Fig. 11.7 Direction and volume of apple and pear exports from Hobart 1960/61. Over 57 percent of 3.93 million cases shipped were destined for British ports; a further 15 percent went to Hamburg, and 8 percent to eastern Australian forelands (Records of fruit shipments, Tasmanian Dept. of Agriculture).

is a regular aspect of port activities and when vessels may even wait in the stream for a berth.

In fact, the declining importance of the fruit traffic in the statistics of the port has been offset in the Sullivan Cove area by the decreasing proportion of total tonnage which is handled at the main wharves. The bulk cargoes like zinc concentrates and petroleum products are handled at the Derwent outports such as the Electrolytic Zinc Co. wharf, and in 1960/61 the port proper despatched only 54 percent of cargo volume. Thus, while this means less traffic basis for development schemes in Sullivan Cove it underlined the seasonality of its trading activity in which fruit represented over 40 percent of the export sector. Table 11.G indicates the uneven movement of shipping for the port as a whole,

Table 11.G

Seasonality of Port Traffic 1960/61

Month	Oversea Arrivals		Interstate Arrivals		Total Net Tonnage	
	No.	%	No.	%	Amount	%
July	17	9	21	7	99,516	7.77
August	15	8	18	6	80,710	6.30
September	9	5	28	10	76,851	6.00
October	14	7	26	9	82,681	6.46
November	10	5	21	7	71,859	5.61
December	18	9	22	8	119,498	9.33
January	16	8	24	8	128,305	10.02
February	12	6	24	8	90,309	7.05
March	21	11	28	10	132,982	10,39
April	26	13	27	9	167,676	13.10
May	20	10	25	9	135,996	10.62
June	15	8	26	9	93,257	7.28
Year	193	99	290	100	1,279,640	99.93

Source: Marine Board of Hobart: Annual Reports

with 34 percent of Oversea vessels, representing the same proportion of tonnage, calling in March-May. Since all the ships additional to the 'normal' monthly average were 'apple ships' (about 25 overall) the increased load on the Sullivan Cove facilities was relatively

Fig. 11.8 Largely residential areas fringing Sandy Bay c. 1961. The Sandy Bay shopping centre (upper left) serves the area under, clockwise with Dynnyrne, Mt. Nelson, and the continuation of suburban Sandy Bay downstream beyond Buckley's Point (right centre). The University of Tasmania is re-establishing (centre left) after 70 years on the Domain site (Don Stephens photo).

Fig. 11.9 The Electrolytic Zinc Co. of Australasia Ltd., among Australia's first twenty firms, occupies much of the peninsula between Prince of Wales and New Town Bays on the western shore of the Derwent. Buildings in the left foreground are the Hobart abattoirs (Don Stephens photo).

substantial. The growing importance of Asian markets in the fruit trade therefore has significant implications for the more balanced and more efficient use of the port area.

Functional Zones: The Outer Urban Areas

As the consideration of city images disclosed, the built up areas beyond the inner city contain several minor commercial concentrations which act as natural nodes for residential districts. Other suburbs are almost wholly residential, with little functional diversity beyond a few corner shops and a hotel or two (Figure 11.8). Additional to these areas is the dominantly industrial district centred on Derwent Park, carrying eastward to the major Risdon plant of the Electrolytic Zinc Co. (Figure 11.9). The generalised distribution of functional areas in the latter 1950s is shown (after Scott) in Figure 11.10. Although the scale is small (Figure 10.38 may be used in conjunction) the Moonah and Glenorchy commercial areas along the Main Road can be discerned, as also the Sandy Bay and Bellerive shopping centres. The North Hobart shopping area just outside the inner city along Elizabeth Street is less obviously located just south of the road junction which leads to Mt. Stuart.

The alignment of these sub-centres to the north-south orientation of the urban area is noteworthy, Bellerive being the obvious exception. Even through some of the lateral residential extensions (for example, South Hobart, Lenah Valley) are as distant from the city centre or a suburban shopping concentration as these sub-centres are from the city centre or each other, they provide no more than two or three shops together. The influence of north-south transport is strongly implied, with through traffic providing a stimulus which locally terminating movement is unable to match. The small development of facilities at Taroona, Claremont and Lindisfarne, each quite distant from a shopping centre, but each more or less at the end of the urban line, seems to bear this out.

Moonah is the best developed sub-centre, being sufficiently removed from the CBD to include branches of chain and department

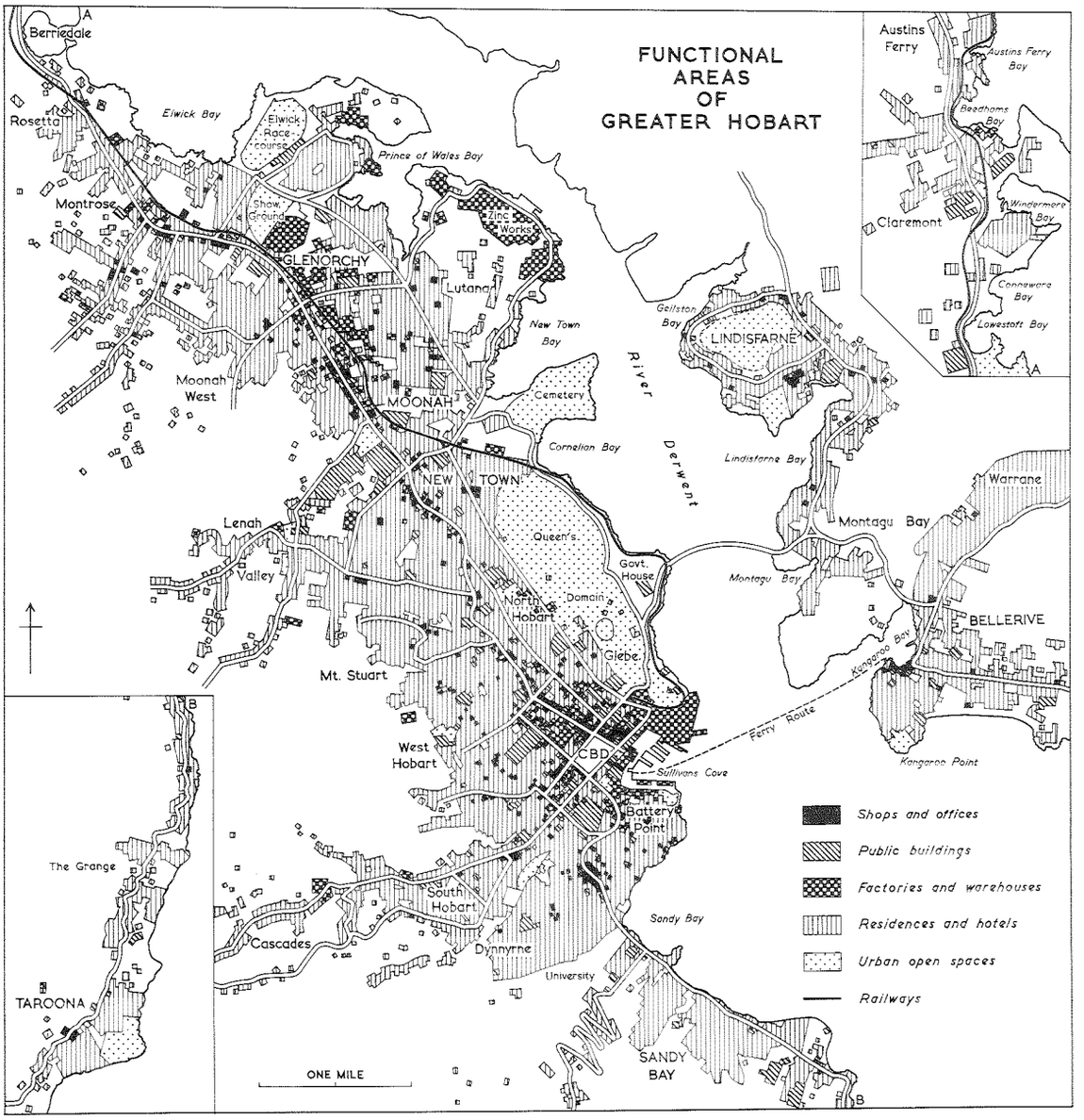

Fig. 11.10 The generalised distribution of functions in the Hobart metropolitan area, c. 1958. Continuation northward of Berriedale is shown at upper right, southward of Sandy Bay at lower left (after Scott).

stores, whereas North Hobart's proximity to (and near-contiguity with) the inner city confines its provisions to convenience shops. Moonah also has historical advantage over Glenorchy on the other side of the industrial zone, though the recent elevation of that district to formal city status will no doubt change their relative status ultimately. The Sandy Bay centre has been greatly developed from the late 1950s, but its emphasis is still heavily on foodstuffs and services (dry cleaning, banking, dentists) rather than the duplication of consumer durable stocks which may be obtained from the city centre one mile away. Considering its isolation and the now significant eastern shore population, the Bellerive sub-centre is unimpressive.[8] The mid-'sixties establishment of a regional shopping complex between Rosny and Warrane (near the head of Kangaroo Bay on Figure 11.10) will almost certainly restrict its further development.[9]

Unitary functions like the racecourse and the cemetery which have all-city associations do not require interpretation here, nor is the information available which would enable lines to be described around the suburban nodes to show their tributary areas. It is proposed rather, in further pursuit of the main functional characteristics of the contemporary city, to examine more fully the structure and distribution of Hobart's manufacturing industry, on which much of the present population depends and which has changed in both nature and location since the nineteenth century.

Hobart's Manufacturing Industry

An indication of Hobart's standing in the distribution of Tasmania's larger manufacturers is given by Figure 11.11. (The rate of Tasmanian industrial growth since 1901 is shown in Appendix XXI). However, relatively few factories employ more than 50 persons in manufacturing processes and in 1962/63 the Hobart urban area

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8 Again, this field is being intensively investigated by K.P. Doddridge to whose study the seeker after more detailed analysis of retail processes and structure is referred.

9 Provided that shopping hours legislation designed to protect central city enterprises from the activity of the Rosny Regional Centre does not remain in force indefinitely.

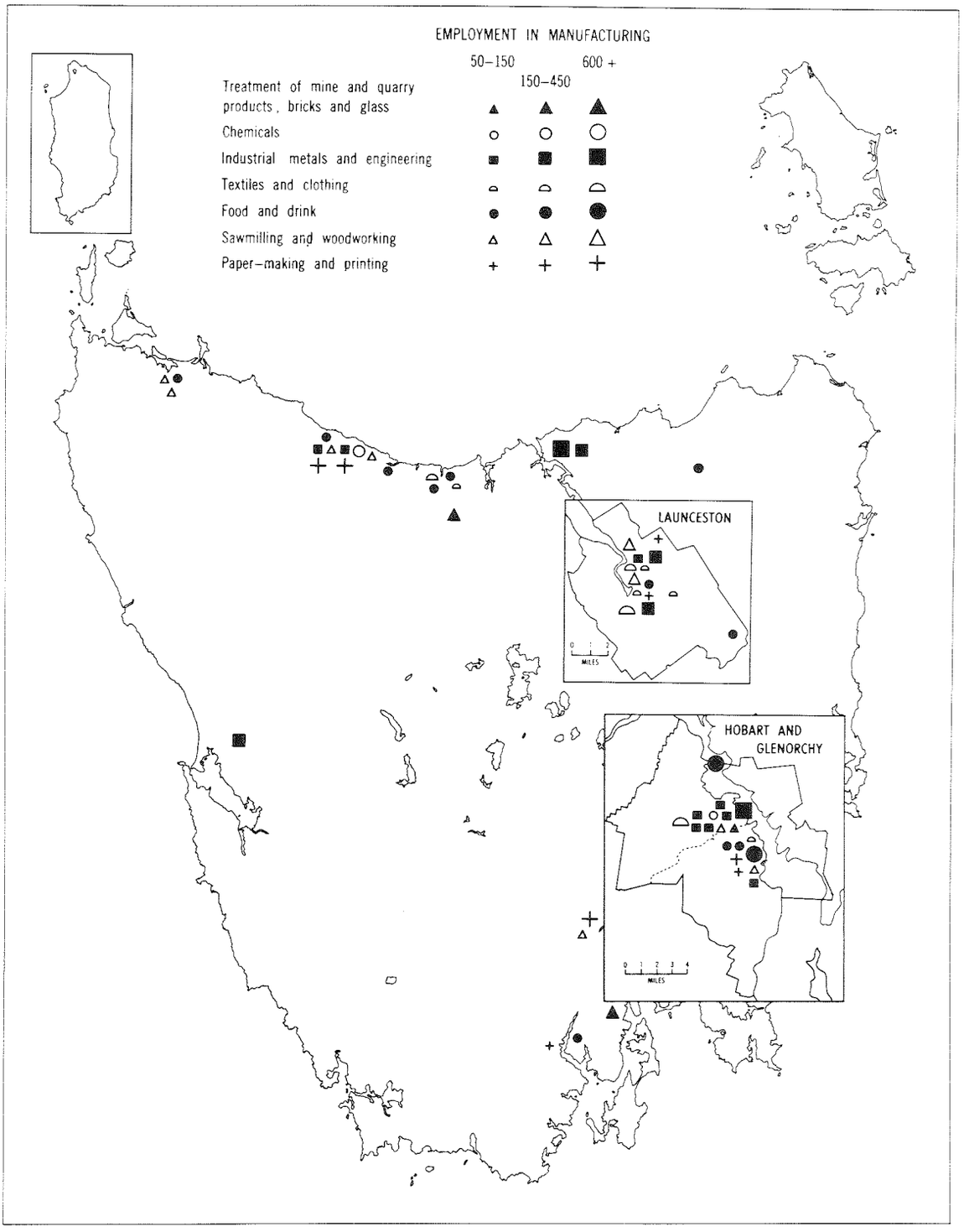

Fig. 11.11 Distribution of Tasmanian industrial firms employing more than 50 people in manufacturing processes, 1963/64 (Questionnaire survey).

contained 392 factories which engaged 36.6 percent of Tasmania's factory employment. In 1954/55 that share had been 40.7 percent and the relative decline reflected the faster growth of secondary industry in the northwestern towns of Burnie and Devonport (Figure 11.13). Within the greater Hobart area there was a notable distinction in the location of factory types, as suggested earlier. That part of the city south of the Glenorchy boundary contained 290 factories which employed about 15 percent of the State's factory workers, whereas the City of Glenorchy had only 102 plants but 21 percent of the employees in manufacturing. By comparison, Launceston's similar proportion of Tasmanian factory hands were employed in 284 establishments (Figure 11.12). The relatively heavy industrial character of Hobart's northern area is further underlined by its possession of only ten percent of the total Tasmanian work force compared with almost 22 percent of the industrial workers.

Calculations of industrial magnitude and intensity also show the Hobart area generally to rank high in the State's secondary industrial pattern. Measurement of magnitude by Thompson's (8) multiple criteria of factory workers, salaries and wages, and value of production saw Glenorchy with an index of 1,160 and the whole city area with 907, whereas only seven of the State's 49 municipalities scored over 100 (Figure 11.14). Intensity of manufacturing activity measured by the ratios of factory workers to total population, factory workers to total work force, and value of production to population showed Glenorchy again leading the State with an index of 227 while Hobart proper scored 134 (Figure 11.15). As far as individual enterprises are concerned the concentration of employment in manufacturing ranged from the minimum of four required for statistical record purposes to the Electrolytic Zinc Company's 1100-odd directly engaged in manufacturing activities and 2700 total employment. In all, 27 percent of the metropolitan work force of 45,000 was employed in manufacturing industry at the 1961 Census and easily the greatest concentration of firms was to be found in the

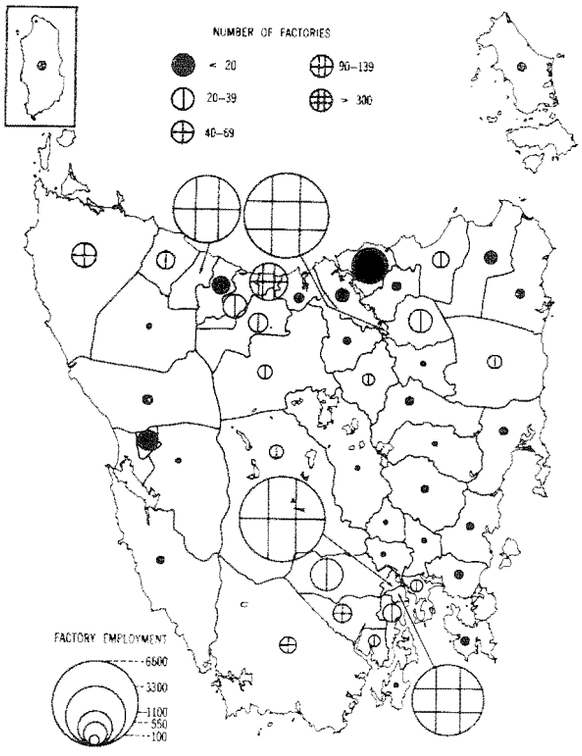

Fig. 11.12 Distribution of industrial employment and factory numbers in Tasmania 1962/63, by municipality (Commonwealth Bureau of Census and Statistics).

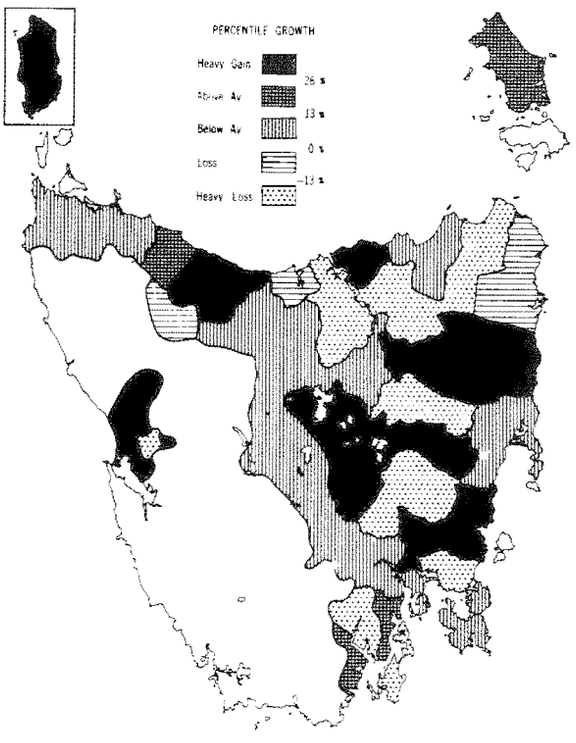

Fig. 11.13 Changes in Tasmanian industrial employment 1955/56 - 1962/63, by municipalities.

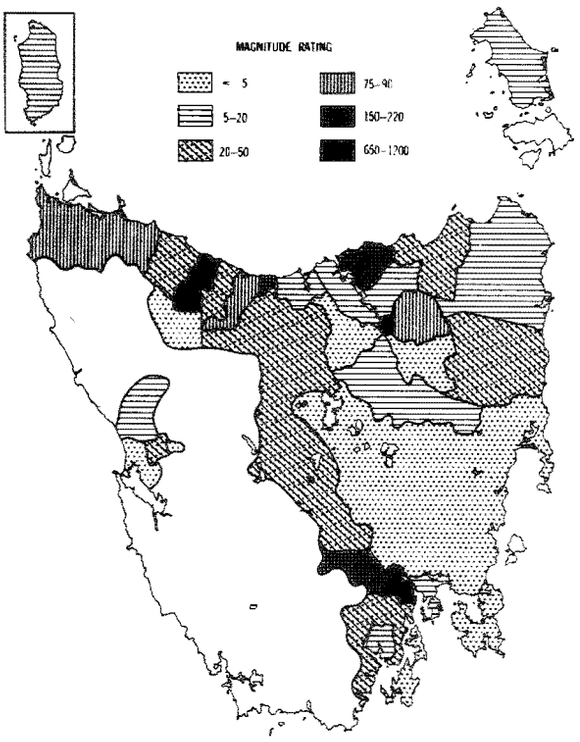

Fig. 11.14 Industrial magnitude ratings 1962/63, by municipalities.

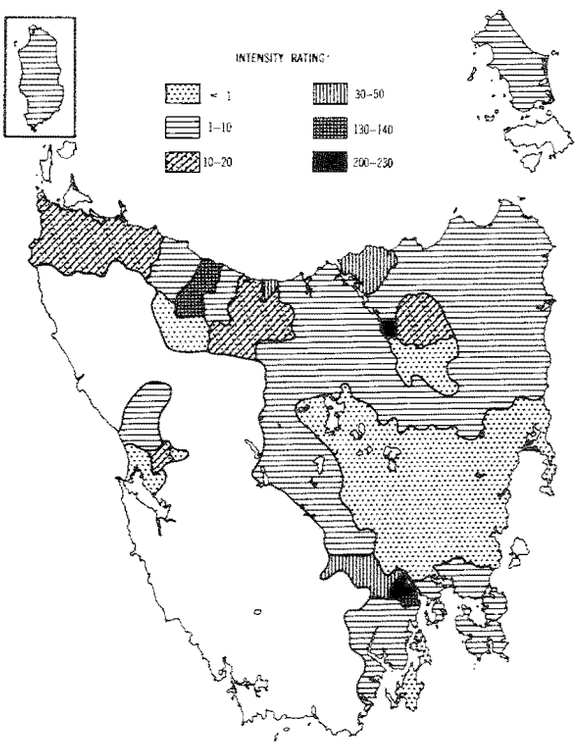

Fig. 11.15 Industrial intensity ratings 1962/63, by municipalities.

Moonah-Derwent Park Vicinity.

Some 35 firms, mostly manufacturing concerns, are located in Appendix XXIII, and six others operate in the vicinity. The dominance of engineering works reflects the Tasmanian position generally, where 33 percent of manufacturing workers in 1962/63 were in Class 4 industries: industrial metals, machines, engineering (see diagram Appendix XXII). Half the Derwent Park engineering plants have agglomerated along Sunderland Street to take advantage of the heavy equipment of Montpelier Foundry (Firm 26), but the most general reason for location in the Derwent Park area, apart from the attraction of flat and accessible land, has been government incentives.

This is the only area of more or less planned industrial concentration in the island, and of the 35 firms shown in Appendix XXIII 14 revealed some form of government assistance at recent interview.[10] Site provision on favourable terms was the main attraction, but increased production with the government as a major customer, and the provision of factory buildings, were among the other incentives. This influence has had rather more effect upon the industrial scene than the number of firms suggests, for 74 percent of the Derwent Park industrial workforce of 1,750 were employed by the firms involved. Of course government incentives are little use if the basic geographical characteristics and economic relationships of the location are suspect, but Derwent Park is on the whole well placed. It occupies one of the few relatively extensive areas of flat land in the urban environs (Figure 11.16); has ready access to available labour; proximity to road, rail and port; and yet is far enough from the inner city to avoid high land rents and problems of circulation. Forty percent of the firms have re-located from former inner city sites since 1945. Access to the Derwent Park railway junction is much valued by those engineering plants concerned with heavy machinery, and Humes Ltd., manufacturers of large cement pipes, shared with the government the cost of a siding development. Most of the products of Hobart's

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10 R.A. Radford, unpublished B.A. thesis (9)

Fig. 13.16 The Derwent Park - Mayfield industrial area southward from Prince of Wales Bay. Smoke in right background of the upper photo indicates the Kiln Co. beyond the rising ground. Albert Road leads to the Moonah shopping centre on the Main Road in the lower view.

manufacturing are destined for Tasmanian markets, and local factors of production tend to be of the first importance. Where, however, the industry is largely oriented to external markets, the tendency has been to find both large-scale operation and locational problems.

Four Hobart industries are large-scale concerns by general recognition. Three of them enjoy waterfront sites, and all produce substantially for Australian mainland or oversea markets. In all cases the local transport linkages are favourable, but in all there must be some degree of disadvantage in shipping the product to main markets distant from the point of manufacture. This Weberian (10) situation has almost certainly varied over time, not least because coastal shipping freights have risen rapidly in post-war Australia. The degree to which other locational advantages continue to offset market-area peripherality can only be guessed, but there seems little doubt that the effect is differential as between manufacturers. Thus, while the advantage of cheap H.E.P. can probably long outweigh freight rates on the high-value product of the zinc works, the initial advantage of temperate climatic conditions for chocolate manufacture is no longer as relevant in offsetting transport costs on the confectionery of Cadbury-Fry-Pascall Pty.Ltd. These matters are, however, somewhat speculative, and each of the leading producers is firmly tied by capital investment. Their main features are tabulated below.

The importance of these few firms in Hobart's export traffic is stated or implied in Table 11.F, and together they account for about 15 percent of the city's employment in secondary industry. Although, as we have seen, the Glenorchy municipality has more than its share of this sector of economic activity relative to population distribution, there is evidence of fairly wide residential distribution of workers in the northern factories. The residential location of the Silk and Textile Printers work force shown in Figure 11.17 is composed of about 19 percent in Glenorchy, 18 percent in Moonah, and six or seven percent in each of Springfield, Claremont and

Table 11.H

Characteristics of Leading Industrial Firms

Name & Location	Employment		Products	Major Markets	Main Locational Advantages
	in Production	Total			
Electrolytic Zinc Co. of A'sia Ltd. Risdon	1140	2730	Zinc ingots, Superphosphate	Mainland Australia	Large waterfront site with own wharf for direct import of concentrates, export of metal; cheap power at bulk rates; adequate labour pool
Cadbury-Fry-Pascall Pty.Ltd. Claremont	850	1350	Chocolate sweets & drinks, Confectionery	Mainland Australia	Spacious and pleasing site (trade mark: "by mountain and sea"); [cool temperatures, clean air] adequate raw-materials; affiliation of Hobart & firm with Society of Friends.
Silk & Textile Printers Pty.Ltd. Derwent Park	600	650	Fabrics	Australia, Overseas	Ex-munitions factory on long terms (1947); good water supply.
H. Jones & Co., Hunter St. Hobart	390	470	Jam-Canned fruit	Mainland Australia Overseas	Proximity to raw materials; Waterfront access, unchanged since 1861

Source: General; questionnaire survey 1964.

Chigwell; in all, about 57 percent in the northern industrial suburbs. This is in line with more general observation of the Derwent Park manufacturers, who seem to have 55-65 percent of their workforce in residential proximity. The managerial workforce naturally shows a greater affinity for the non-industrial suburbs like New Town and Sandy Bay, and the question of residential quality will be further examined below.

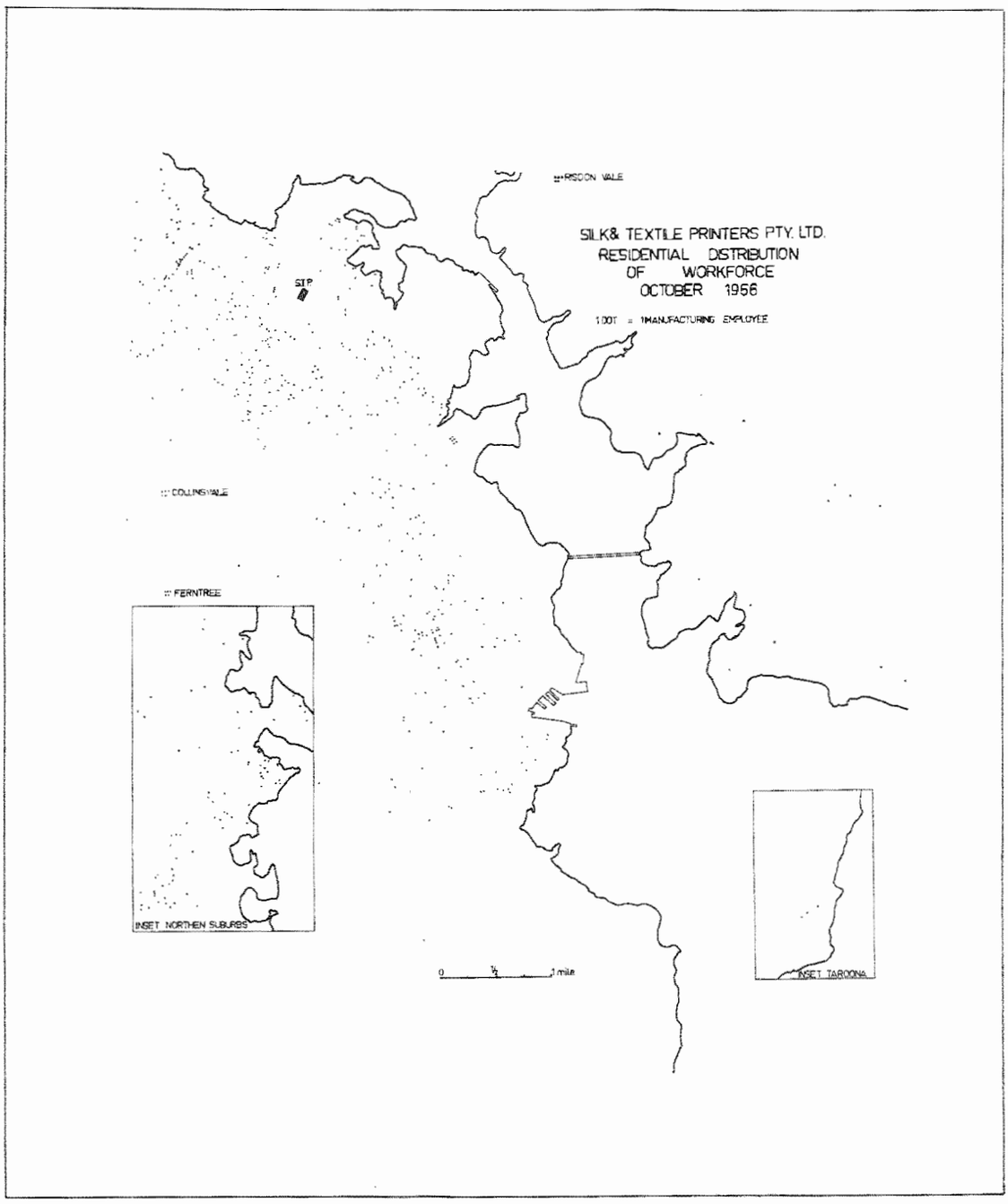

Fig. 11.17 Residential distribution of the work force of Silk and Textile Printers Pty.Ltd., Derwent Park, 1966 (after Radford).

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(10) A. Weber: Theory of the location of Industries, Chicago, 1929 (translation C.J. Friedrich).

Chapter 12

Property Valuations and Residential Quality

The annual value of all inner area property in 1954 was £837,269 -- eight times the face value of the same area in 1847. In the intervening period the number of functional units had increased by 115 percent (from 3,337 to 7,164), which is reflected in the more modest rise in average property value[1] from £30.5 to £116.9. The distribution of the total value shown in Figure 12.1 in general resembles the 1847 distribution (Figure 2.3), with a clear concentration of value at the commercial centre, falling away to less than 0.5 percent of the total in a number of peripheral blocks. In detail, as foreshadowed in the previous chapter, the dominance of a few core blocks was greater, with the inevitable consequence of a reduction in the share of total property possessed by some other blocks. The structure of the distribution at the two points of time is compared in Table 12.A. The noteworthy feature

Table 12.A

Distribution of Inner Area Valuation 1847 & 1954

Percentage of Total Valuation	Blocks 1847		Blocks 1954		Percentage Change 1847 - 1954
	No.	%	No.	%	
> 6.0	--	--	1	0.8	+ 0.8
4.0-5.9	2	1.8	2	1.7	- 0.1
2.0-3.9	11	10.0	7	5.8	- 4.2
1.0-1.9	22	20.0	21	17.4	- 2.6
0.5-0.9	32	29.1	31	25.6	- 3.5
0.1-0.49	30	27.3	56	46.3	+19.0
< 0.1	13	11.8	3	2.5	- 9.3
Total	110	100.0	121	100.1	+ 0.1

Source: Assessment Lists and Assessment Roll (1)

is the substantial increase of area with a small share of overall

1 Strictly, unit function value. For many whole properties (building and allotment) in 1847 the value was the total of shop plus house, shop plus store etc. Although the first of these combinations declined markedly in number, some central buildings became larger so that the value of the whole building and its land could be the total of several shops and many offices.

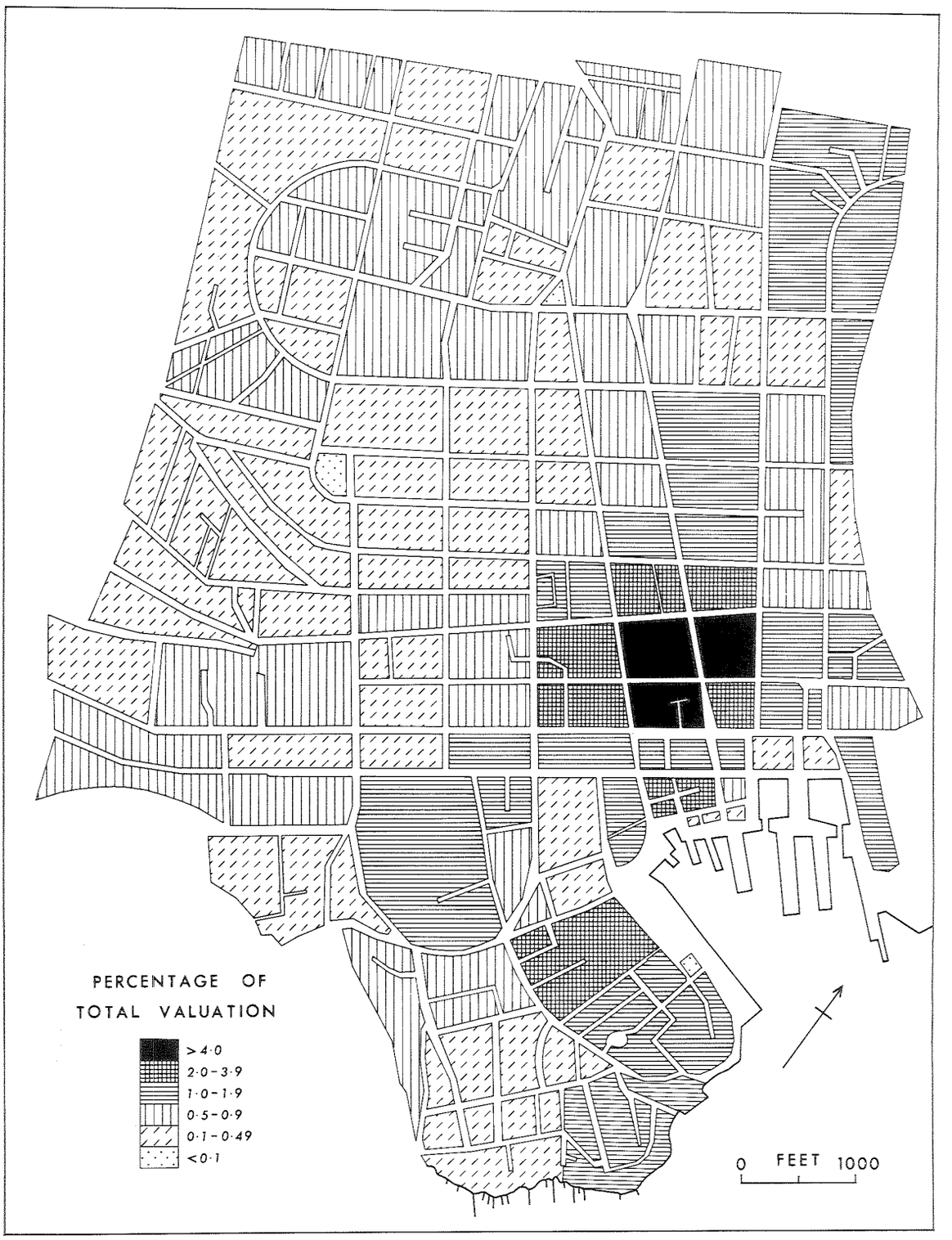

Fig. 12.1 Distribution of total inner urban property valuation 1954, by block (Assessment Roll, 1954/55).

property value, though infilling of once sparsely settled blocks has eradicated proportions of less than 0.1 percent from all but three abnormally small blocks.

The six leading blocks (four of which were among the first six in 1847) were now rather more oriented to Collins than Liverpool Street, with five frontages on the former and four on the latter (Figure 12.2). Only the 5th-ranking block lacked a cross-axis alignment on Collins Street while the continuing long-axis, Elizabeth Street, was fronted by the first three and 5th-rank blocks and also the 7th (shared with Liverpool) and 8th (shared with Collins). The question of spatial movement in the rank order will be considered in Part 4; here the strength of the leaders is the first concern. From Table 12.B we find that the six most valuable blocks had, by nearly decupling

Table 12.B

Leading Block Proportions of Inner City Valuation

Rank	Block No. (Fig. 2.5)	Valuation (£)	%	Rank	Block No. (Fig. 2.5)	Valuation (£)	%
1	85	66,097	7.89	7	99	19,674	2.35
2	86	40,593	4.85	8	101	19,420	2.32
3	100	33,602	4.01	9	88	17,602	2.10
4	69	31,791	3.80	10	53	16,810	2.01
5	84	28,293	3.38	11	68	16,228	1.94
6	70	20,408	2.44	12	108	14,471	1.73
Six Blocks		220,784	26.37	Six Blocks		104,205	12.45

Source: Assessment Roll 1954/55

their combined annual value, gathered almost another four percent of the inner urban total. Each of the first five improved on its 1847 share, most notably the main block with a 52 percent increase, leaving it with a 163 percent greater total than its nearest competitor. After the first six blocks of property concentration the rank share diminished gradually enough; nevertheless the second six could muster less than half their accumulation of real estate and some two percent less of the area total than their 1847 counterparts. Although there is fair comparability of block size throughout the study area, some

Fig. 12.2 Distribution of block average property valuations 1954, in four categories. Values in pounds (Assessment Roll, 1954/55).

smaller blocks are disadvantaged in comparing property totals and there is good reason to consider the distribution of average values.

The Distribution of Average Values

The most obvious feature of note in Figure 12.2 is the coincidence of highest average with highest total valuations in the core area. Only Block 73 containing Parliament House and Block 87 containing Government offices and the Town Hall (and previously Government House) had also been in the highest category of average values in 1847. Thus while public buildings retained a leading rôle in this respect, the remaining emphasis had moved from warehouse to retail property and consequently from the waterfront in general to the distinct though hardly distant area centred on the Elizabeth-Collins Street intersection. On the other side of the port from Parliament House Block 116 on Hunter Street carried the highest single average, owing to the large industrial occupant of the area.

The second category was almost wholly contiguous with the highest block averages, and most of the areas fell within the dominantly commercial centre, whereas in 1847 a second concentration of this order existed on Battery Point. The only outlier in 1954 was Block 42, where a collection of large religious and educational buildings belonging to the Roman Catholic Church provided high average assessment. A remarkable contiguity overall is displayed by the more numerous third-category blocks, which almost surrounded the higher values except for the break in the east caused by the port. They extended continuously from Trinity Hill in the north to Fitzroy Gardens in the south, approximating a value scarp of north-south strike with most of the lower values on the western dip-slope. Just over half the inner city blocks averaged less than £100 per property (compared with £117 overall) and the main western area of coverage closely resembled the distribution of the lowest (sub-£25) category of 1847. In addition, in 1954 many Battery Point blocks were modestly assessed, divided now from the South and West Hobart tract of similar rating by a ridge of higher value around the Barracks-Fitzroy residential zone. The eastern water-frontage section of Battery Point

(Block 62) shared this medium range.

The categories used in Figure 12.2 are fairly broad, but they make for simple cartographic recognition. A more intensive analysis

Table 12.C

Ranking of Block Average Property Valuations 1954

Number of blocks: 121

Range of average values: £39.9 - £2.838.7

Deciles	Value (£)	Deciles	Value (£)
9th	404.02	4th	71.30
8th	244.40	3rd	62.88
7th	146.58	2nd	57.10
6th	116.16	1st	53.44
5th	85.20		

Source: Assessment Roll 1954/55

of the valuation structure is indicated in Table 12.C. It can be seen that only blocks in the 7th to 10th deciles contained property which averaged more than the functional unit average of £116.9; not an entirely unexpected confinement if we recognise the ease with which a sprinkling of small or old buildings can lower a value level which is generally above their own. In other words, it is easier for a unit of property to maintain relatively high value than for an average series of 59 units to sustain the level for a block. Furthermore, the range of average values cannot extend below zero, and was in fact £39.9, while the upper limit can be infinite and was actually £2,838.7 for the two large factories and a shop of Block 116.

The tendency towards homogeneity of property (more accurately: similarity of value level) in particular areas is indicated by the fact that while residential units averaged £59.7 for the whole inner city (only stables and vacant land being lower) this value fell about midway in the 3rd decile. That is, consistent grouping of lower value property than the relatively low residential average must have occurred. This in turn implies environmental influence in the form of site, access, and socio-economic context, and therefore the land

value element in total improved property value and valuation.

Minor Blocks and Valuation Rank

These factors almost certainly bear upon the area-unit employed and vice versa. The desirability of using the town block was discussed in Chapter 2. Apart from its general convenience and ease of identification it has the fundamental advantage of being the working unit of town land, next in scale above the individual buildings which it contains. Although block size varies somewhat for absolute statistical comparability to be achieved it may well be the optimum unit of area analysis in the urban context. There is little doubt that block size is itself a factor in property value just as allotment size and position is known to affect land values. By way of illustration: the small size of Blocks 31 and 63 effectively prohibits high-value building, and the blocks have consistently held some of the lowest average valuations. Similarly, large blocks enable spacious residential or public buildings to be placed, giving high average values but often only moderate totals, owing to the relatively wasteful use of land. In the light of these relationships some cognizance should be taken of changes in block structure with a view to finding whether such changes have real significance for the distribution of average values.

The distribution of blocks in 1847 clearly had to be the controlling influence in earlier analysis. The total of 116, of which 110 contained assessed property, was extended to 122 for the 1954 analysis by including reclaimed land around lower Davey Street and the port and by completing the partially occupied western area of Battery Point to the Bath Street scarp. Of all these only Block 75 lacked assessed property and it was merged with Block 73 to which it had in practice been attached, leaving 121 areal units. Not all the blocks were identical in 1954 and 1847, as comparison of any two representative maps shows. The basis of their definition, with just a few exceptions, was the division of one area from another by a negotiable street. Minor access routes which subdivided an area further or gave penetration without circulation were mostly ignored,

though some consideration was given to local circumstances, notably comparability with adjacent blocks. Thus although Melbourne (now Victoria) Street severs a corner of Block 69 in the C.B.D., and Victoria, Watchorn and Criterion Streets bisect Blocks 70, 68 and 84, they are all treated as comparable wholes.

The effect of breaking down the standard unit may be two-edged, and its influence may vary with differential mixes of function. For example, sub-division of a major commercial block by a minor street increases access to the block interior. Specialist shops, eating places and offices may be attracted to the new frontage, but not large shops catering for mass movement of people, and requiring supply and delivery transport. The total value of property is thus increased for the time being, though the average may be lowered by the advent of smaller occupiers paying lower rents on their intermediate frontages. In the longer term it is possible that future expansion of the larger firms back from the main exterior frontages might be curtailed because of the line of access now defining property limits more rigidly than allotment backs which are susceptible to transfer of ownership. Much may depend upon the detailed composition of functions in an affected area and upon their profitability and fortuitous development plans. If, however, subdivision takes the form of the 'normal' breakdown of residential Block 29 into two standard blocks, the effect seems unlikely to be complicated or depreciating.

With such considerations in mind average valuations were calculated for all the sub-blocks of the inner area, so that Block 1 had four sections, Block 6 had five, and so on (Figure 2.5). This was particularly merited where main street extensions since 1847 had cut through once over-sized blocks causing their continued treatment as whole units for comparative purposes to seem a little artificial; for example, Blocks 29, 111, 87 and 58 (compare Figure 2.5 with 1.2). In addition some artificial subdivisions were made on the basis of topography or land use, which in practice produced break-down of the wider area if not access along the line of division. Thus in Figure 12.3 Block 18 has been subdivided where occupation ceases in the vicinity of the Hobart Rivulet, and in Block 39 the Barracks area

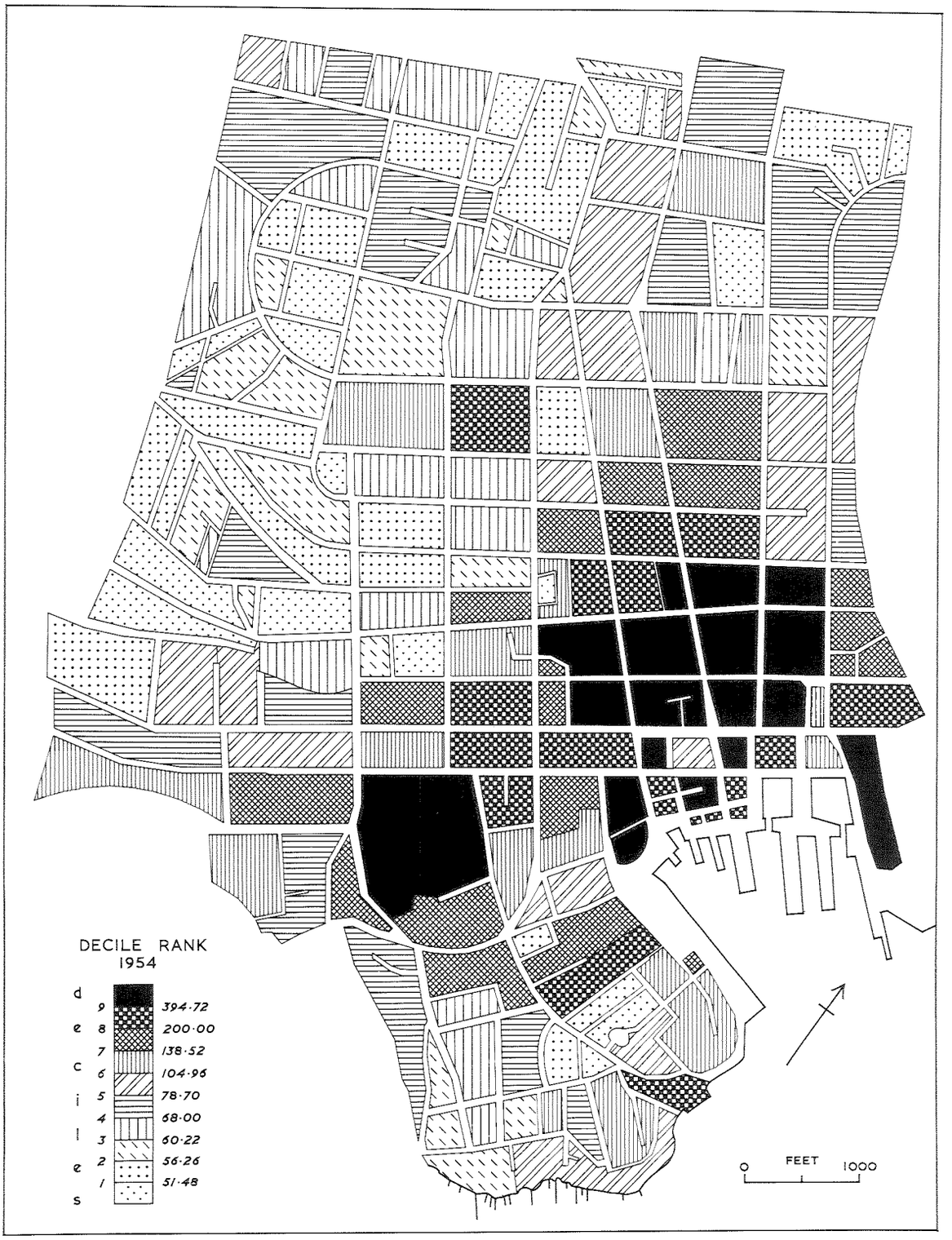

Fig. 12.3 Decile rank of average property valuations 1954, by sub-blocks. Values in pounds. (Assessment Roll, 1954/55)

has been separated from the remainder. The 177 major and minor blocks defined in this way were ranked in deciles, giving rise to the pattern of distribution in Figure 12.3. The inter-decile values did not vary greatly from those for the 121 blocks (Table 12.C), the main discrepancy being the ≏200.0 to ≏244.4 between the 8th and 9th deciles. With an added five or six members of each rank the total range was better used and there was a general lowering of the inter-decile values.

Since many blocks were unchanged in area the basic pattern established in the map of average values (Figure 12.2) came through. The dominant core was enhanced by the inclusion in the 10th decile of several blocks of significantly lower absolute value than the top category of Figure 12.2, and there was a fairly clear grading-off in rank along a north-south line which is diagonal to the map. This rather more intensive break-down of the data enables pockets of low or high value which are smaller than normal block size to be seen without the modification of adjacent linked areas. Thus a small wedge of food processing industry on Battery Point (part of Block 62) showed out in the 9th decile, compared with 6th and 7th decile areas around about, and the sub-block surrounded by Harrington Lane in Block 68 ranked several deciles below the main body of the block. It seems almost general that small sections isolated from standard blocks are depressed below their levels. In addition to the Harrington Lane area, the corner of Block 69, the end of Block 70, both cut off by Victoria Street, and the corner of Block 53 between James Street and Montpelier Retreat were well below 'parent' block levels. In Block 10 the corner was higher value than the whole, but part of a progressive decline westward. Two better examples of westward rank reduction may be seen. The adjoining Blocks84 and 68, which are each divided, showed the declining order of influence of the Elizabeth, Murray and Harrington Street frontages, while between Macquarie and Davey Streets Block 87, 71, 49, 38, 20 and 19 fell progressively from the 10th decile to the 5th. Where initially undivided blocks have been cut into several parts little consistency between or among them is apparent.

except that they did not usually embrace a wide range of ranks. Thus in Block 1 and 17 the deciles represented were the 4th, 5th and 6th; in Block 28, the 4th and 5th; in Block 77 the 1st, 3rd and 6th; in Block 58, the 1st, 2nd, 6th and 7th.

The use of ten value categories in Figure 12.3 as against four in Figure 12.2 could be expected to produce more detailed differentiation of values even without the introduction of a more intensive area subdivision. The exercise has been less than revelationary, but it reveals or emphasises a few general features of the 1954 property value distribution:-

1. The Barracks block was the only one in the 10th decile outside the immediate C.B.D.-port vicinity.
2. The 9th and 8th deciles showed concentric tendencies around the commercial core, extending southwestward to the Barracks which almost formed a secondary nucleus.
3. Only at the very periphery did any block on the long Elizabeth Street axis or along Davey and Macquarie Streets fall below the 5th decile (even though many were in the lowest value group of Figure 12.2).
4. The almost unbroken extent of lower value blocks in the western half of the area (from Block 20 to Block 102) in Figure 12.2 ranged generally from the 1st to the 6th decile in Figure 12.3.
5. The effects of block subdivision by minor roads are inconclusive, with local site factors seemingly as important as any. However, adjacent sub-blocks did not often vary by more than half the decile range and there was a tendency for sub-blocks as for whole blocks to decline progressively in rank and value as distance from a major axis (Elizabeth Street) or focus (C.B.D.) increased.

Residential Valuations and Residential Rank

Despite the clear ascendancy of central commercial property in the inner city's valuation patterns, residential property accounted for a greater proportion of the total than any other single component (and fractionally less than all commercial uses). By area, the

residential distribution was overwhelmingly important as a direct consequence of its 67 percent share in total functional units and the generally low density of the distribution. It is the aim here to examine the characteristics of the inner area residential property in some detail, and to extend the analysis more broadly to middle-distance suburbs.

In the light of previous discussion concerning Hobart's property values, prospect and convenience might be most expected to influence the location of the more desirable and highly assessed residential areas. Other influence is likely to come to bear in the form of those forces which underlie Hoyt's sectoral hypothesis of urban growth (2). The tendency for like quality of use to expand outward from the centre by a process of contiguous extension confined laterally to the proportions of a sector has social implications which may transcend site factors. But clearly the relative strength of physical and social influences will affect the issue. In what may be regarded as a permissive physical environment the perpetuating tendencies of particular uses or quality can operate without impediment. When, as in Hobart, the relief provides differentially desirable locations and accompanying barriers to movement, it can be expected that property of a particular kind will not be confined to sectoral patterns and that it may occur at several unconnected points, thereby exemplifying the multiple nuclei concept of urban development put forward by Harris and Ullman (3).

Consideration of Figure 12.4 gives little support for this last possibility. Although the area concerned was only the inner section of a more extensive whole and should not be exclusively seen in isolation from it, maximum dimensions of almost 2 x 1 1/2 miles allowed adequate space for differentiation of uses, as has already been established. The distribution of quintile ranks reveals a strikingly unbroken zone of higher residential value southward from the C.B.D., with only two outliers in Blocks 42 and 62. The appearance of homogeneity conferred by the uniform shading is somewhat misleading, for significant variations in residential character were represented in Table 12.D. Block 113 down to Block 71 was firmly in the commercial centre, with 113 and 83 rather

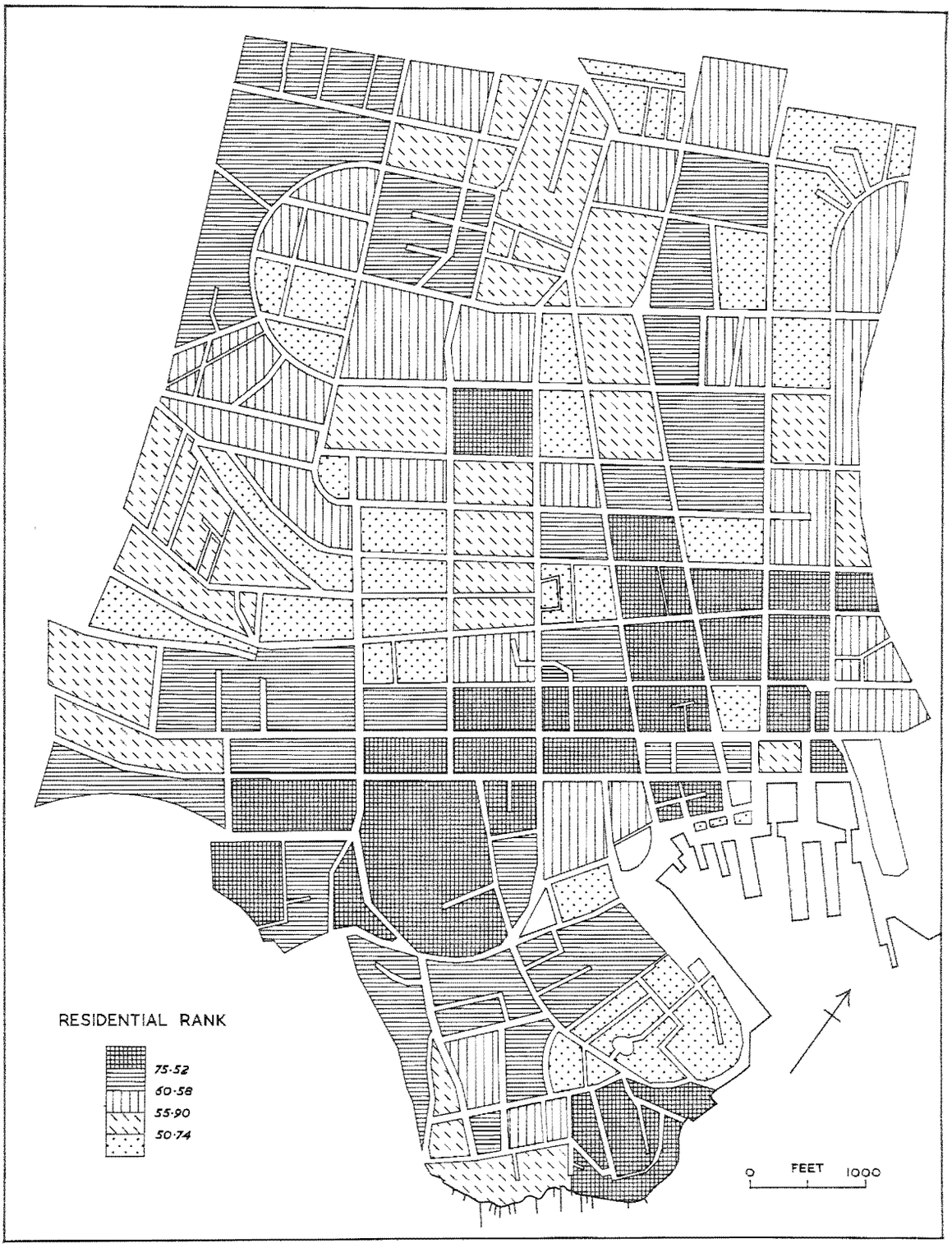

Fig. 12.4 Distribution of residential rank 1954, by blocks. Quintile values are in pounds. (Assessment Roll, 1954/55)

less part of the core than the others. Much of the residential property consisted of caretakers' quarters in office buildings,

Table 12.D

Inner Residential Characteristics -- 5th Quintile Blocks

Block No.	No. of Residences	Average Value (£)	% of Block Value	Block No.	No of Residences	Average Value (£)	% of Block Value
113	17	109.1	38.0	70	23	83.2	9.4
106	7	75.7	7.6	71	30	78.8	18.6
107	3	405.7	13.0	48	10	147.8	26.0
108	8	88.3	4.9	49	28	94.8	31.7
110	1	101.0	5.5	50	41	79.3	38.2
99	10	81.1	4.1	38	26	83.5	55.7
100	2	125.5	0.7	39	46	101.6	52.3
83	20	90.1	17.4	22	58	94.9	74.6
84	16	129.4	7.3	23	22	92.3	99.0
85	2	90.5	0.3	25	17	76.9	44.9
86	12	81.3	2.4	62	89	83.7	73.5
88	3	83.7	1.4	42	1	152.0	6.3

Source: Assessment Roll 1954/55.

and the possession of relatively high value did not mean identification with high residential quality. These units derived their status from land value rather than the form of improvement, and the generally low residential proportion of block value total is indicative of the small place held by residences in the area.

The remaining contiguous 5th quintile blocks, linked in the Macquarie Street office zone to the C.B.D., were of quite different character. They were the successors of the town house and close-to-the-centre area of residential quality defined in 1847; some of the buildings were of course unchanged. This is an interesting persistence of quality long beyond the time when the Barracks-to-port zone was the scene of considerable activity and there was (speculatively) social attraction in being resident in an area of administrative importance. The physical attributes and economic convenience of the locality remain, of course. It is still just up the hill from the port and city centre, which the Davey Street sites overlook, and within easy walking distance of central functions. It is doubtful whether the area will remain as residentially desirable another century

hence. In 1954 the blocks east of Molle Street already carried much of their value in non-residential property, although houses were easily the most numerous, but gradually the office function has been extending south-westward along Davey and Macquarie Streets so that only west of Molle Street in the area centred on Fitzroy Place is residential occupance still almost complete.

Block 42 is unrepresentative, though it illustrates how one occurrence of a particular form of activity or land use could in 1954 (or now), as in 1847, impose its influence on the cartographic depiction of structural conditions. However, it also illustrates the essence of the property unit as a basic element in (and tool for) urban analysis. In each of Figures 12.2, 12.3, and 12.4 the block stands out among those around it, which is exactly what it does in the townscape, being wholly occupied by the Roman Catholic Cathedral, St. Mary's College, St. Peter's School, and one large residence and tennis courts. The price for spaciousness and functional distinction in largely lower value residential surroundings is an undistinguished place in Figure 12.1, showing block proportions of total inner city valuation. Block 62, on the other hand, gathered its high residential standing from no less than 89 residential properties, and an almost unbroken waterfront exposure the influence of which needs no reiteration.[2]

None of the 4th to 1st quintiles displayed the same coherence as the 5th. About half the 4th quintile blocks filled out the southwestern locality into a wider zone of still-good residential quality along Davey and Macquarie Streets and on the landward half of Battery Point. At first sight Block 53, with one frontage on the wharves, was an unlikely member of this rank, but 86 of 121 components in 1954 were houses and the high-value units along Hampden Road not only backed the wharves at some distance but stood above the 80 foot contour and the Salamanca warehouses on their sea-level dolerite base cut into side of the ridge in the 1830s.

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2 The factories which made up the remaining quarter of block valuation are from most viewpoints tucked away below the 40-foot contour facing east.

Several groupings of three to six blocks of like rank occurred in various parts of the area outside the main belt of 5th and 4th quintile rank, showing on the whole little evidence of concentricity or sectoralism. (Only the eastern side of Elizabeth Street, with Block 97-90 in the 4th quintile, made a comparable sectoral extension with the wider southerly band already discussed). Perhaps the most notable of these was the group of six 1st quintile blocks along Molle Street making a steep gradient immediately north of Blocks 18 and 37 in the 4th quintile. Again this repeated a phenomenon of a century earlier which can only be explained in physico-economic terms. The area rises from the rivulet but is overshadowed by higher ground on all sides but the east. Those blocks at the foot of the row between Molle and Barrack Streets, Blocks 35 and 36 had a mixture of factories, warehouses, shops and hotels among 60 small houses in one and 58 in the other. These functional transition characteristics saw Block 36 with the low average residential value of ₧39.7, which increased progressively with elevation to ₧50.0 for Block 33, and then ₧59.9 which carried Block 32 into the 3rd quintile. On the other side of Molle Street both Blocks 12 and 15 rose westward and with ₧49.6 and ₧49.7, respectively, rated slightly above the facing eastern blocks.

The three-quintile gradient on Molle Street was repeated in the northeast where the 4th-quintile Elizabeth Street Blocks 90 and 91 were adjoined on the east by 92, 102 and 103 in the 1st quintile. It was surpassed on Battery Point where Blocks 56, 57 and 58 in the 1st quintile lay between Block 62 in the 5th and Block 53 in the 4th. Distance from the city centre, access to main lines of movement, and relative elevation and outlook appear to be quite potent influences in producing substantial value changes over short distances. In the northwest corner there was a more gradual transition from Blocks 13, 7 and 6 in the 3rd quintile to Blocks 3, 2 and 1 (higher up the flanks of Knocklofty and above Lansdowne Crescent) in the 4th. Eastward to Elizabeth Street a group of 2nd-decile blocks generally lacked ease of access and lay below the Knocklofty group.

Reference has been made earlier to the public image of districts

or suburbs beyond the inner city, and Figure 12.5 attempts a wider portrayal of residential differentials over an area almost co-terminous with the City of Hobart.[3] The range is extended below and particularly above that identified in the quintile distribution, and we find that none of the inner areas reached the highest category. Nevertheless the leading blocks of the 5th quintile can be recognised although the continuity is lost. It is clear that residential assessments averaging more than £125 were rare in the City of 1954. Even in Sandy Bay the strip between Lambert and Derwentwater Avenues and the small block seaward of Norfolk Crescent (note the absence of Streets) were the only instances. Two other such concentrations occurred, one on the east side of Davey Street south of Elboden and Fitzroy Gardens, overlooking Sandy Bay and the estuary from about 250 feet; and the second in the heart of New Town's larger residences, bounded by Auvergne Avenue and Augusta Road. Each of these highest value pockets enjoyed relative elevation and excellent outlook, though not necessarily higher elevation than all other areas, as Willie found with larger socio-economic units in Syracuse, N.Y. (4). They were also of brick construction (Figure 12.6). The New Town block rises steeply above the main access route of Augusta Road and commands a sweeping view across lower suburban land to the northern estuary and Mt. Direction. The South Hobart block is even better placed with a southern outlook from a scarp falling steeply to the valley of the Sandy Bay Rivulet and with a straight downhill run along Davey Street to the city centre. Not all the Derwentwater sites have such sweeping views, but the avenue runs sharply to 180 feet from the major route of Sandy Bay Road and some of the sites are among the few whose field of view embraces both the port-Battery Point and Mt. Wellington.[4] The Norfolk Crescent pocket is mainly below 80 feet, but it enjoys immediate access to Sandy Bay

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3 Added to which the Municipalities of Glenorchy (north), Kingborough (south) and Clarence (east) make up the metropolitan area.

4 Including that of the late Professor S.S.Orr, identified by local bus tours over a number of years.

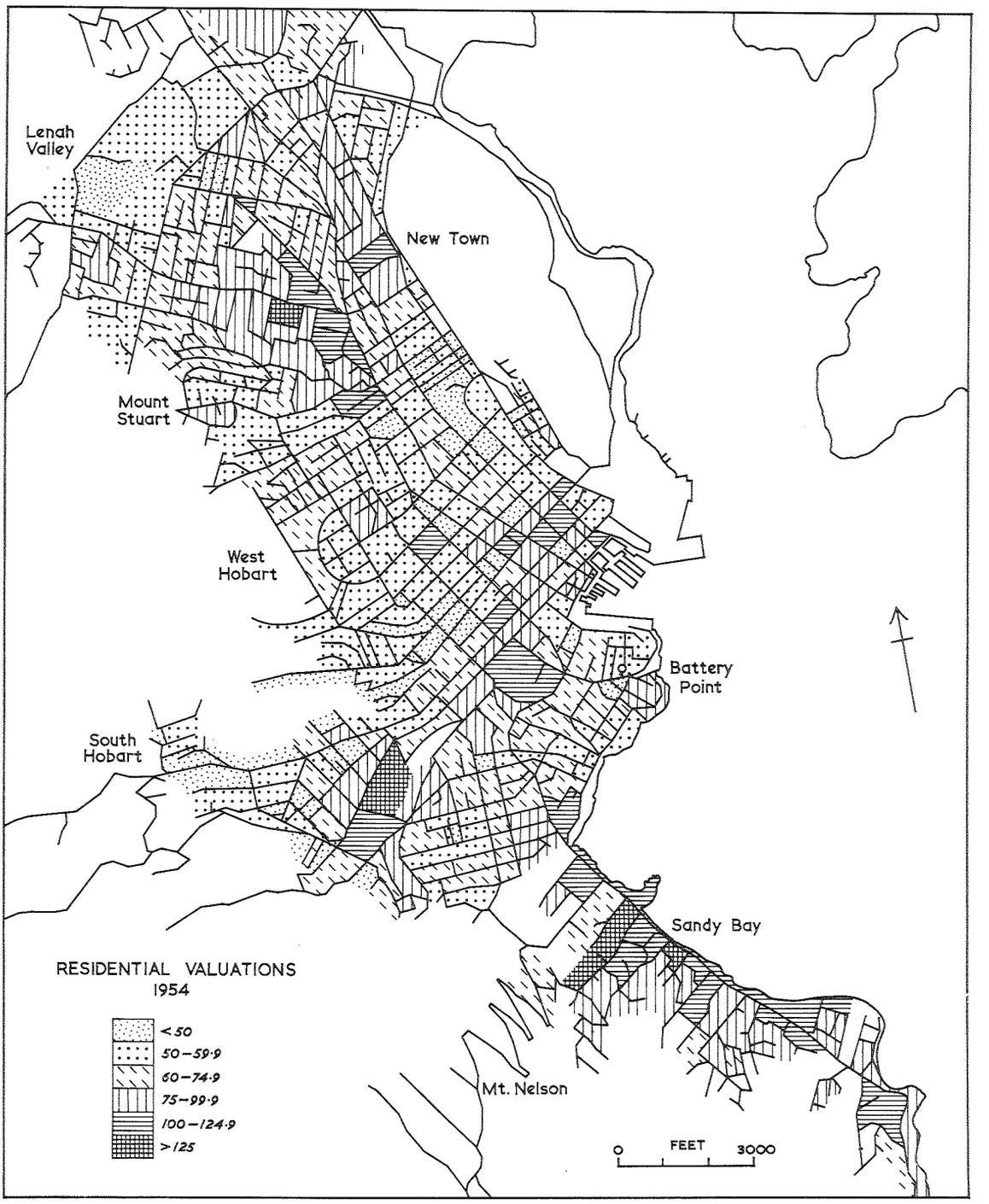

Fig. 12.5 Distribution of residential valuations in the City of Hobart, 1954. Values in pounds. (Assessment Roll, 1954/55)

Road, at the same time standing above it. The area is a post-war subdivision of a large estate and the recency of building adds value to the properties. All this is in general accord with the earlier findings of Hoyt (2).

Similar, but clearly less impressive combinations of accessibility and aesthetics affect the more extensive areas of residential property in the ≧100-125 category of annual value. Interestingly, the extensive stretch of Sandy Bay in this range had closer affinity with the route-way and waterfront than with the hillside sites rising to 200 feet or so behind. New Town provided the only other fairly extensive area of this status, nearly all to the west of Elizabeth Street on the eastern slopes of Mt. Stuart. One surprising component was the arch-shaped block between Elizabeth Street and Commercial Road whose outlook across uninspiring North Hobart suburban land to the Domain, and perhaps proximity to Friends' School, must have outweighed the excessively close relationship with traffic flow on two sides.

The third-highest category of residential value was mainly contiguous with those more highly classified areas previously discussed. Some timber construction was now included (Figure 12.6). Most of the remainder of Sandy Bay, several blocks in South Hobart, the belt between the C.B.D. and Fitzroy Place, a quite extensive section of Mt. Stuart - New Town and another area of New Town between the Domain and the main road accounted for most of the category. Remembering the arbitrary nature of such divisions and regarding these first three largely contiguous distributions as gradations rather than compartments, it becomes apparent that districts rather than pockets of residential quality have been established. The areas mentioned fell within the upper half of the range of block average residential values, most of the remaining parts of the City did not. In the peripheral municipalities which make up a substantial part of the total metropolitan area some waterside localities in Taroona, Berriedale and Claremont, and Lindisfarne, though not whole suburbs, probably shared (and share) the upper half of the value range. To plot the complete distribution would be a mammoth task and to select small sample areas could well be misleading because of the demonstrable

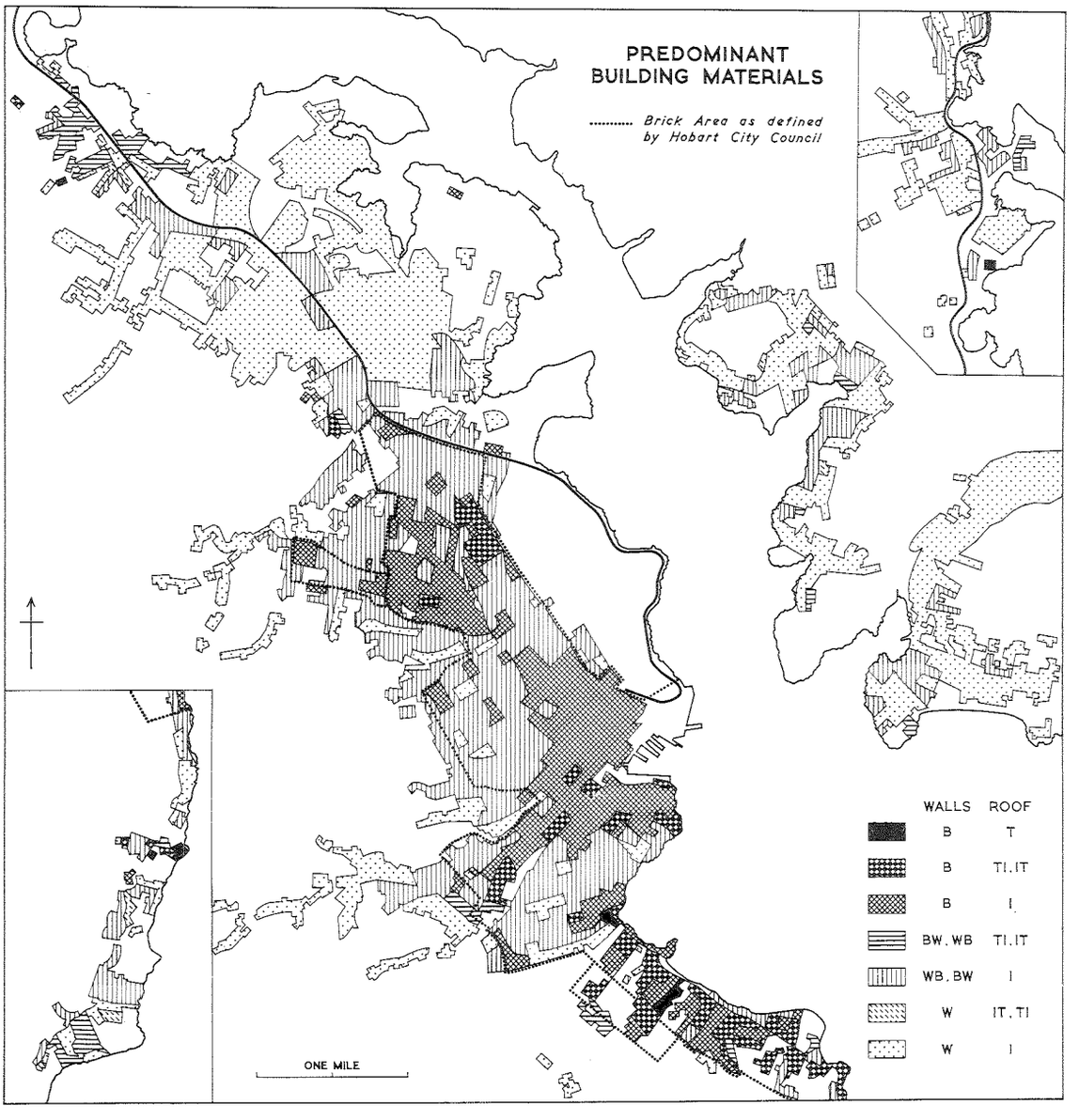

Fig. 12.6 Generalised distribution of predominant building materials in the Hobart metropolitan area, 1958. Combination categories are based on block percentages of main materials. B = brick, W = wood, T = tiles, I = iron (after Scott).

variations over short distances.

Most of the broad variations in residential quality can be recognised by the interested observer of townscape, of which, consciously or otherwise, there are many. Since the laws of supply and demand underlie the whole field of property ownership and quality in a free society, the average householder plays a significant part in maintaining the status of particular localities. Those interested in and able to afford aesthetically pleasing yet convenient locations are unlikely to buy into or uncharacteristically develop an area which can be seen to lack these qualities. (There are always exceptions to prove this rule: houses that stand out as superior constructions to the standard values of the surrounding properties). Thus an area like West Hobart, with some commanding elevations and accessibility less than optimum but certainly no more difficult than Mt. Stuart's, has been perpetuated as a lower value residential zone since the first property assessment of 1847. The 'redbrick' older section of Sandy Bay, of more recent advent but similarly high density (see Figure 10.6), of standardised houses and close-to-street building alignment, also falls into the middle to lower categories, joining with Battery Point to form an appreciable zone of this quality (Figure 12.3).

Elsewhere external forces may prove stronger than the influence of residential selection. The Moonah district's encompassing of an industrial complex precludes any possibility of high residential status. But behind industry's presence lay the availability of flat land at low elevation, so even without industrial development the district was extremely unlikely to acquire a greatly different residential character. This bears upon the broad question of cause and effect, but on the Hobart evidence it is difficult to deny the determinist influence of site elevation upon the quality and location of property. There is no instance (from the quantitative records employed) of any substantial area increasing its residential standing, and therein lies one of the underpinnings of the sectoral concept: while commercial and other profitable functions make disruptive inroads into the pure stands of residential quietude the only solution to the problem of re-establishing desired standards of townscape and tranquility is to

move toward the periphery of pre-urban land. The changing composition of inner urban property will be examined more closely in Part 4.

References Chapter 12

(1) Assessment Roll 1954/55, Tasmanian Government Gazette, 1954, 1509-1765.

(2) H. Hoyt: The Structure and Growth of Residential Neighbourhoods, Washington D.C., 1939.

(3) C.D. Harris & E.L. Ullman: The nature of cities, Readings in Urban Geography (Mayer & Kohn), Chicago, 1959, 277-286.

(4) C.V. Willie: Land elevation, age of dwelling structure and residential stratification, Professional Geographer, 13, 3, 1961, 7-11.

(5) P. Scott: Building materials in Greater Hobart, Australian Geographer, 7, 1959, 149-163.

Chapter 13

Population, Employment, and Political Affiliation

The demographic characteristics of Hobart's population since 1954 have been or are being examined in Tasmanian or Australian urban contexts in several quarters (1, 2, 3, 4) and the present purpose is not to duplicate those findings. This thesis seeks to reveal the evolving fabric and function of the Hobart settlement, and not every facet of demographic structure can be shown to have a direct bearing on these matters. Apart from atypical features (such as the large convict element referred to in Chapter 5) which clearly influence the whole social milieu and the growth capacity of the society, it is the societal aspects of the present 'normal' population which are considered most relevant to this investigation: the economic and political composition of the people rather than fine shades of variation in death rates or child/woman ratios. Again, as for Hobart in the nineteenth century, the city will be considered both as an entity and as a composite of differential parts.

In 1954 Hobart's 95,000 people were 31 percent of Tasmania's 308,000 and by the 1961 Census almost 116,000 inhabitants in the capital represented 33 percent of the island's total, still by far the lowest capital/State ratio in the country. These city dwellers were the youngest in any State capital, with 31.4 percent under 15 years in 1961, and correspondingly the proportion of working age (15-64) was lowest, at 60.3 percent. Hobart's higher fertility than Launceston's was notable (child/woman ratios 536 and 497, total fertility rates 3.68 and 3.52), the same relationship in 1954 having been attributed[1] to the capital's greater isolation from mainland cultural influences than experienced by the northern part of the island. The City of Hobart's population structure by quinquennial age groups in relation to that for Tasmania for 1954 and 1961 is

1 P. Scott: The changing population of Tasmania, Geographical Studies, 4, 1957, p. 18

shown in Table 13.A. The much smaller proportion in the youthful

Table 13.A

Age Composition of Hobart Population 1954 and 1961

Years (%)	1954				1961			
	Hobart		Tasmania		Hobart		Tasmania	
	M	F	M	F	M	F	M	F
0 - 4	4.3	4.2	6.1	5.9	4.1	4.1	6.1	5.8
5 - 9	3.8	3.9	5.6	5.4	3.8	3.8	5.6	5.4
10 - 14	3.8	3.7	4.4	4.2	4.3	4.4	5.4	5.2
15 - 19	3.5	4.0	3.6	3.5	4.2	4.7	4.0	3.9
20 - 24	3.6	3.8	3.5	3.3	3.9	3.7	3.4	3.2
25 - 29	3.9	3.5	4.0	3.6	3.0	2.6	3.1	2.9
30 - 34	3.6	3.6	3.9	3.8	3.1	2.9	3.5	3.2
35 - 39	3.3	3.6	3.6	3.4	3.2	3.1	3.5	3.3
40 - 44	3.4	3.7	3.5	3.2	3.0	3.4	3.2	3.1
45 - 49	3.2	3.3	3.0	2.6	3.4	3.5	3.1	2.9
50 - 54	2.7	3.1	2.5	2.3	3.0	3.2	2.7	2.4
55 - 59	2.3	2.8	1.9	2.0	2.5	2.8	2.1	1.9
60 - 64	2.2	3.0	1.7	1.9	2.1	2.7	1.6	1.7
65 - 69	1.7	2.3	1.4	1.6	1.7	2.3	1.2	1.5
70 - 74	2.4	3.9	2.1	2.5	1.3	2.0	1.0	1.3
75 +	0.0	0.0	0.0	0.0	1.5	2.6	1.1	1.5

Source: Commonwealth Census 1954 and 1961.

age groups (24.5 percent) than for the whole metropolitan area (31.4 percent) indicates particularly the influence of the industrial northern suburbs on the broad base of the age pyramid. The full benefits of high fertility in Tasmania as a whole and even in Hobart are not experienced. Hobart gains by intrastate migration from rural areas, but loses young people to the mainland where 20 percent of the Tasmanian-born resided in 1954. Sixty-one percent of them were in Victoria.[2] With these demographic fundamentals established the disposition of the working population among the several fields of economic activity can be examined.

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2 R.S.J. Farmer: Population, Atlas of Tasmania, p. 50

Structure and Distribution of the Work Force

In Table 13.B the employment structures of the City and the metropolitan area are compared against the overall Tasmanian and Australian structures. Some general Tasmanian economic characteristics

Table 13.B

Structure of the Work Force: Hobart, Tasmania, and Australia

Industry Group (%)	Aust-ralia 1954	Tasmania 1954	Hobart City 1954	Hobart City 1961	Metropolitan Hobart 1961
Primary production	15.0	19.7	1.2	1.1	1.5
Manufact-uring	29.7	24.9	25.3	23.0	27.4
Buildg. and construc-tion	8.9	11.1	8.9	8.7	10.1
Transport and communic-ation	9.0	8.9	10.5	9.5	10.2
Commerce	15.6	14.0	18.6	18.5	21.9
Finance and property	2.7	2.3	4.2	5.1	3.5
Public auth-ority, professional	12.1	12.1	21.0	23.9	15.4
Amusement, hotels	6.1	6.0	9.5	7.9	6.8
Other	1.0	1.0	0.8	2.0	1.2
Total number	3,702,022	117,562	23,653	22,961	45,031

Source: Commonwealth Census 1954 and 1961

were reflected in the balance of the urban area's employment. Thus, despite the high standing of Hobart in the State's manufacturing activity (including power production), the proportion of the metropolitan work force (and even more, the City of Hobart work force)

was less than the overall Australian level of engagement in secondary industry. The concentration of commercial and professional services is also to be expected in the capital city, and the table shows that this was the case in both 1954 and 1961, with the City proper clearly holding the lion's share of these activities. Commerce and finance and property both grew notably in Tasmania during the 1954-61 intercensal period, with 33 and 43 percent increases compared with only 10.8 percent for the whole work force. The City also held much more than the State's 13.75 percent share in the public authority, community and professional services in 1961, though the addition of the rest of the metropolitan area reduced the concentration to only 12 percent above the State level. The growing importance of the urban area beyond the City boundary was reflected in the three percent decline in the City's work force during 1954-61, with central area functions replacing residential accommodation in the manner of inner city zones everywhere.

The relative strengths of Hobart's economic activities are best shown by location indices which relate the metropolitan area's share of particular activities to its share of the total work force.[3]

Table 13.C

Employment Group Location Indices: Hobart, Launceston and Tasmania

Industry Group	Hobart	Launceston	Tasmania
Agriculture	11	12	122
Forestry	28	42	195
Fishing	73	13	191
Mining & quarrying	18	9	188
Manufacturing	96	107	81
Building & construction	115	146	125
Transport & storage	103	119	103
Communications	135	102	113
Finance & property	145	120	84
Commerce	113	123	89
Public & professional	151	106	100
Amusement	129	114	100
Percentage national work force	1.03	0.55	3.2

Source: Commonwealth Census 1954.

3 These were used by the writer in a paper on the Australian work force given in 1961 and published in 1962 (5), since when J.N. Britton (6) and others have discovered that P. Sargant Florence invented the technique. His localization coefficients are well demonstrated in the classic Investment, Location, and Size of Plant (7), and other good illustrations are provided by Nicholson (8) and Fryer (9).

Hobart had 1.03 percent of the Australian work force in 1954 and where a particular activity had the same proportion of Australian employment in that pursuit the index of location was 100. In these terms Hobart's fields of employment concentration were few, although if the relative measure were within Tasmania the city's manufacturing position would have emerged much more strongly: 96 against 81 rather than 100. Even so, Launceston showed as the stronger manufacturing centre in relation to its smaller work force.

Hobart's index of commercial location indicated a definite concentration of activity, but was noticeably lower than the smaller capitals (Adelaide and Brisbane 127, Perth 144) as well as Launceston. This may have been the consequence of the dominant position of the main city block and the concentration of much of the commercial activity in a few firms which were quite large for the city's size. The high index for public authority, community, and professional services was in line with a capital city role, and it is clear that Launceston's lack of the Parliament, associated Government departments, and the University were reflected in its much lower index, which underlines the town's secondary status. This is the general area which has done much to maintain Hobart's ascendancy since it first became the seat of government. Finance and property's index of 145 was likewise appropriate to capital status, though here the greater proximity of the Launceston index showed that some offices and agencies are represented in the northern town first and Hobart second. In transport Launceston's position was superior, with more frequent air services and railway nodality, whereas Hobart was the end of the line. In the 'sixties, however, increasing sea ferry and container cargo services may have improved Hobart's relative position, but probably not by much since no large employment changes were involved. It might also be noted that while Hobart's fishing index is far below the State's, it is rather high for a capital city.

The manufacturing in Hobart referred to in Chapter 11 is reinforced in the data of Table 13.D showing how the engineering and food and drink groups stand out, having 41.4 and 25.9 percent of 1961 metropolitan manufacturing employment, respectively. In nearly

Table 13.D
Employment in Manufacturing Industries
(percentage of each area's Work Force engaged)

Industry Group	Australia 1954	Tasmania 1954	Tasmania 1961	Hobart City 1961	Metropolitan Hobart 1961
Founding engineering	7.1	4.7	5.0	7.0	9.8
Ships, vehicles	3.8	1.7	1.4	1.0	1.0
Yarns, textiles	1.5	2.1	2.5	0.6	1.0
Clothing	2.6	0.8	0.5	0.9	0.7
Food, drink	3.9	4.0	4.1	5.2	6.1
Sawmilling, wood products	1.5	3.2	2.8	0.6	0.8
Paper printing	2.0	3.4	4.0	2.2	2.0
Other	2.3	2.6	2.3	2.1	2.2
Total number	1,027,331	26,443	29,531	4,506	10,626

Source: Commonwealth Census 1954 and 1961.

every industry the addition of the northern suburbs strengthened the urban position relatively as well as absolutely, although in textiles even the metropolitan area lay well behind the Tasmanian proportion owing to the strong localisation of that industry in Launceston.

The distribution of the metropolitan work force in 1961 among the three widely recognised categories of primary (extractive), secondary (manufacturing), and tertiary (service) industry was approximately 2 percent, 39 percent and 59 percent, revealing the very considerable emphasis on the tertiary sector in a city of few more than 100,000 inhabitants. This can be compared (rather than contrasted) with examples elsewhere (10,11). Not all the service functions are confined to the resident population of course, and in the several fields of transport, government, commerce, and education part or whole of the State benefits directly from employment concentrated in the capital. Bunker made an assessment of selected city forming and city serving functions for the mainland capitals (12), but very much more intensive analysis, probably at the level of the firm,[4] would be required to show how much the

4 Exemplified by Linge (13) and Logan (14)

insurance, wholesale, tertiary education, and government sectors of Hobart employment were linked to the rest of the State and were thus central place or basic activities, and how much they were of local or nonbasic significance. The basic-nonbasic concept of urban economic functions[15] is widely accepted as a useful discriminator, but in most of its applications the differentiations have been arbitrary and unproven.

The only completed work on Hobart which provides data of the kind envisaged is not concerned with input-output linkages of an industrial kind but with the input of university students (16). One measure of the significance of the University of Tasmania to the people of Hobart, Launceston and other areas of the State is given by Table 13.E, dealing with full-time students. Most part-

Table 13.E

Geographical Origin of Degree Students 1918-1957

Period	Hobart %	Launceston %	Other Urban %	Rural %	Students surveyed	Total students
1918-1927	68.9	6.6	13.1	11.4	61	102
1928-1937	66.5	15.6	12.3	5.6	179	185
1938-1947	47.8	21.4	17.6	13.2	341	356
1948-1957	54.0	16.1	16.9	13.0	882	885

Source: Scott (16), Table 1, p. 130

timers came from the capital, so their addition would strengthen the institution's Hobart significance and relatively weaken its regional position. One aspect of Hobart's intra-urban intake bears on previous analysis of residential quality. When New Town was the most fashionable suburb in the inter-war period Sandy Bay provided many more students, but since World War II and the growth of Sandy Bay's high ranking southern half New Town has made the larger contribution.[5] The tendency for university students to come from middle-class professional and clerical origins seems to confirm the relative status of the two suburbs, which both drew considerably larger

5 P. Scott: Some geographical aspects of the selection...of... university students in Tasmania, Aust. J. Educ., 3, 1959, p.135

numbers of students than the lesser ranking areas between, or the industrial areas north of New Town (Table 13.F). We now turn to

Table 13.F

Suburban Origins of Hobart University students 1928-1957

Suburb	No.	%	Suburb	No.	%
Glenorchy	11	1.46	Battery Point	23	2.03
Moonah	45	5.93	South Hobart	87	11.47
New Town	155	20.44	Sandy Bay	139	18.33
Lenah Valley	31	4.08	Bellerive	21	2.77
North Hobart	52	6.86	Other	105	13.85
West Hobart	61	8.05			
Central Hobart	28	3.69			
			Total	758	99.96

Source: Scott (16), pp. 134-6

an aspect of population and society which involves not only those with an interest in higher education but the entire adult population, irrespective of their enthusiasm for the machinery of democracy.

Political Affiliation at Two Levels

In the Australian Federal system most of the adult population votes to elect two Governments in four Houses of Parliament (apart from local government by municipal, shire or city Councils). The Commonwealth (otherwise known as Federal) Government is formed by the majority party in the House of Representatives, and for Tasmanians the major party in the State's House of Assembly constitutes the Tasmanian Government. It is Hobartians' relationship with these two lower houses rather than the houses of review, the Senate and the Tasmanian Legislative Council, which will concern us here.

The State of Tasmania has had a Labour government continuously since the 1934 elections, prior to which the Liberal Party held office with a break only between 1923 and 1928. Even in the Australian context of typically long reigns by the party in government only Queensland has equalled the longevity of Labour in power in

Tasmania (17, 18). The consolidated pattern of political affiliation for 1934-59 is shown in Figure 13.1 as a background to closer examination of the Hobart area. The affiliation is calculated on the percentage of primary votes in nine elections for the House of Assembly, and the majority levels represent breaks in the voting continuum between extreme Liberal and extreme Labour allegiance. It can be seen that the electoral subdivisions of Denison (inset) include an example of each of the more committed Labour and Liberal categories, together with the three degrees of commital between them.

The electorate of Denison is one of five into which the State is divided. It is surrounded by the electorate of Franklin. Whereas the whole of the Hobart urban area once fell in Denison, that is no longer the case. Seven of the eight subdivisions shown on the Figure 13.1 inset, all excepting the northernmost (Moonah), approximate the extent of the City of Hobart. Four Franklin subdivisions -- Derwent Park and Glenorchy in the north, Kingborough in the south, and Clarence east of the river -- together with Moonah account for the outer areas of metropolitan population. The cumulative political allegiance of a quarter of a century shows clearly enough the relationships between party voting and residential or functional character. Thus in the industrial north Glenorchy, Derwent Park (taken out of the Moonah area in 1955), and Moonah have been heavily Labour-oriented. In the centre, the commercial core and the transition-low value residential areas to the north and west of it were identified with the dominantly Labour subdivisions of Hobart, North Hobart (actually west of Hobart subdivision), and West Hobart (due south of North Hobart!). Between this central zone and Moonah the middle-high value suburb of New Town showed positive Liberal affiliation, and south of the centre South Hobart and Queenborough leant slightly toward Labour. On the southern extremity of Denison the Nelson subdivision, including the Sandy Bay residential area, was the strongest Liberal area in the State.

Although for reasons of religion, family tradition or independence of mind some electors do not vote in line with their occupational

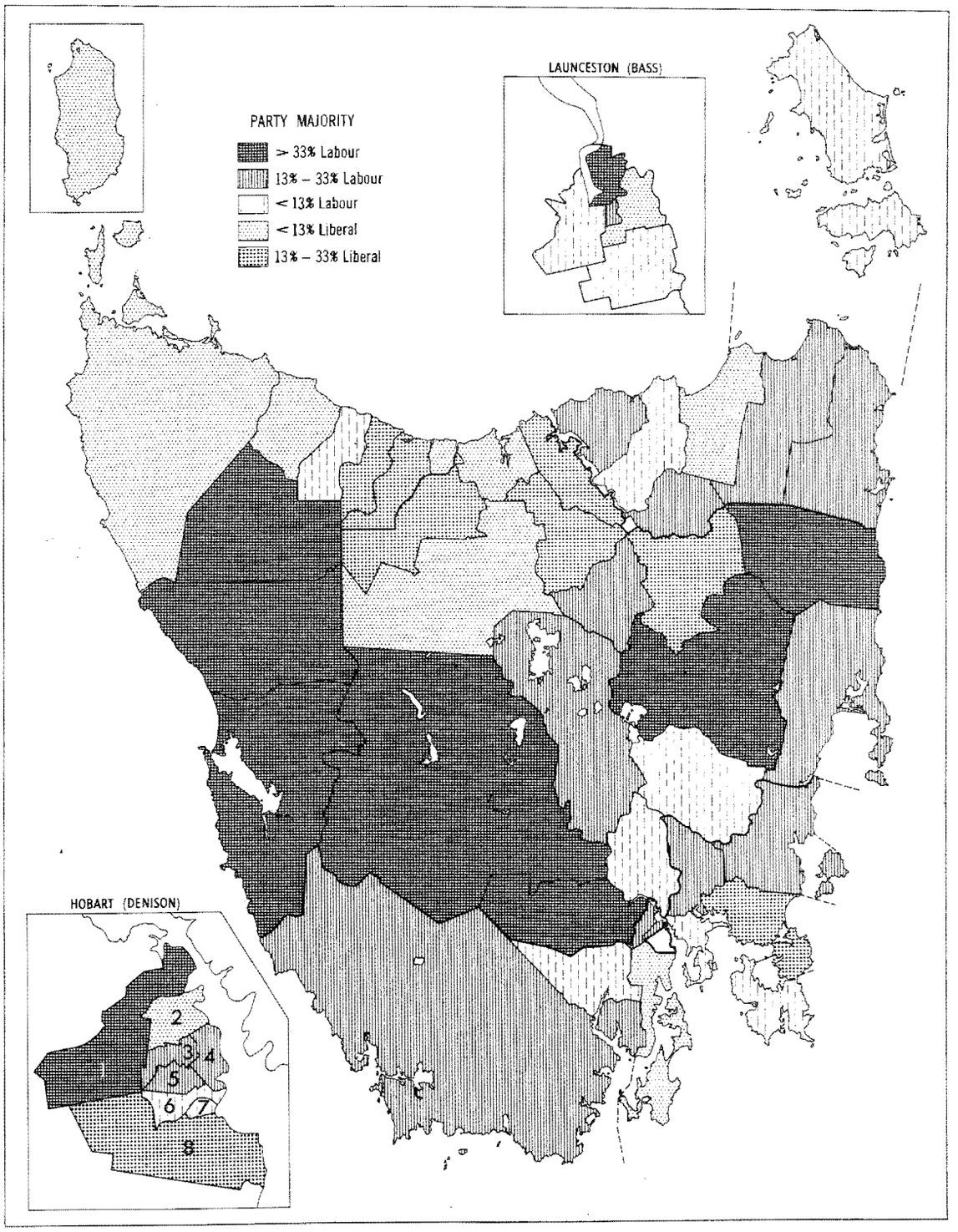

Fig. 13.1 Consolidated political affiliation in Tasmania 1934-1959, by party majority of primary votes in electoral subdivisions for the House of Assembly (Electoral Returns, Parliamentary Papers).

Denison Subdivisions

1. Moonah
2. New Town
3. North Hobart
4. Hobart
5. West Hobart
6. South Hobart
7. Queenborough
8. Nelson

interests, the general trends of political affiliation among major occupations is fairly well established.[6] Therefore in the light of what is already known of suburban Hobart the pattern illustrated was not entirely unpredictable. One important qualification has to be made, however. Political affiliation at State and Federal levels is not necessarily, and never actually, the same. The political

Table 13.G

State and Federal Political Affiliation in Hobart Subdivisions 1958-1964 (percent primary votes*)

Subdivision	Federal 1958		State 1959		Federal 1963		State 1964	
	Lab.	Lib.	Lab.	Lib.	Lab.	Lib.	Lab.	Lib.
Denison								
Hobart	48.4	38.2	52.9	25.9	52.5	37.2	56.9	33.8
N. Hobart	43.3	44.6	46.7	31.7	47.7	43.5	52.3	37.2
W. Hobart	38.9	48.6	43.5	34.2	43.4	46.1	46.6	40.9
S. Hobart	36.7	49.8	39.0	39.3	39.6	51.2	42.2	44.3
Queenborough	36.4	51.1	40.0	39.4	38.1	52.0	43.4	45.6
New Town	28.9	59.1	32.5	45.1	33.6	56.2	39.8	49.0
Nelson	16.0	75.4	17.9	64.0	19.5	73.1	20.8	67.1
Moonah	47.8	39.8	52.3	27.8	55.1	36.1	62.2	29.0
Franklin								
Derwent Park	49.6	39.8	61.8	28.7	60.4	32.6	69.4	24.8
Glenorchy	45.4	45.5	55.4	35.5	55.3	38.0	62.9	30.2
Kingborough	28.2	63.8	32.2	57.4	37.0	57.1	35.8	54.5
Clarence	40.5	51.9	47.8	44.1	49.7	44.7	55.6	37.4
No. led	3	9	8	4	6	6	7	5
Av. lead %	9.3	19.5	16.6	21.0	14.8	20.8	24.7	15.7

* Any difference between the sume of the Liberal and Labour proportions and 100 percent is the vote for independent or other-party candidates.

Source: Electoral Returns, Parliamentary Papers

6 Australian Gallup Polls during the period 1946-55 indicated the following voting intentions among N.S.W. electors (% to vote Labour):-

Professionals, business owners, managers	12-17
Farmer owners	13-21
Small business owners	24-42
White collar workers	29-45
Skilled workers	54-74
Unskilled farm workers	68-72

Source: S.R. Davis (ed): The Government of the Australian States, pp. 621-3 (19)

parties are the same but the candidates and the issues are not. In addition there is survey evidence which suggests that many people who have known no other Tasmanian Government than a Labour one, particularly those in government departments and agencies, support Labour at the State polls and Liberal at the Federal. The developmental aspects of this will be examined in Part 4, but the contemporary situation, which is appropriate to this section, may be seen in Table 13.G.

The much stronger Labour showing at the State level can be seen in the number of subdivisions won: 15 out of 24 at two elections, compared with 9 out of 24 in two Federal elections. The average majority per subdivision led is not a measure of overall party leadership, since all have not the same voting strength. In every subdivision without exception the Labour lead is stronger or the Liberal lead is weaker at the State polls than at the Federal. The position is summarised in Table 13.H. Thus in the industrial stronghold

Table 13.H

State-Federal Differentials in Subdivisional Affiliation
(two-election average percentage majority over main opponent)

Subdivision	Electors in 1963	State Majority		Federal Majority		State Pro-Labour Differential
		Labour	Liberal	Labour	Liberal	
Hobart	1257	25.0	-	12.7	-	12.3
North Hobart	4116	15.0	-	1.5	-	13.5
West Hobart	3011	7.5	-	-	6.3	13.8
South Hobart	3509	-	1.2	-	12.3	11.1
Queenborough	2706	-	0.6	-	14.3	13.7
New Town	6766	-	10.9	-	26.4	15.5
Nelson	4320	-	46.0	-	56.5	10.5
Moonah	4826	28.9	-	13.5	-	15.4
Derwent Park	5076	38.8	-	18.8	-	20.0
Glenorchy	6304	26.3	-	8.6	-	17.7
Kingborough	5093	-	22.0	-	27.8	5.8
Clarence	12287	11.0	-	-	3.2	14.2

Source: Electoral Returns, Parliamentary Papers

of Derwent Park a 60-70 percent vote for State Labour, giving more than a 30 percent majority over Liberal, is reduced to a 20 percent Federal majority by an increase in Liberal support and a corresponding decrease in Labour affiliation. Glenorchy and Moonah on either side of the Small Derwent Park subdivision exhibit similar but less extreme

differentials, stemming from 45-55 percent Labour allegiance Federally and 52-63 percent State-wise. Even the very strongly Liberal Nelson subdivision cuts back its approximately 75 percent Liberal support to 65 percent in the Tasmanian lower house elections, and in past-its-prime New Town the differential is higher. Overall, the improved position of Labour in the State as against the Federal sphere is remarkably consistent, only Kingborough lying outside a 10-20 percent range, and it is the least urban of the subdivisions, including as well as suburban Taroona a substantial farming population along D'Entrecasteaux Channel and on Bruny Island. Only two subdivisions of the twelve have in recent times given majority support to a different party for the respective Parliaments. West Hobart gave a Federal Liberal majority of 9.7 percent in 1958 and 2.7 percent in 1963, whereas its State voting majority was 9.3 percent Labour in 1959 and 5.7 percent in 1964. While this represents the decidedly swinging vote of just over 3000 electors in a fairly stable lower-middle rank socio-economic area, the situation in Clarence has been rather different. There, an 11.4 percent Liberal majority in the 1958 Federal election became a 3.7 percent State Labour majority in 1959, 5.0 percent Federal Labour majority in 1963, and an 18.2 percent Labour majority in the 1964 House of Assembly elections. While candidates, policies and party images are always relevant, the most changing circumstance of the eastern shore was the increase in electors from less than 8,000 to more than 12,000, many of the increase being associated with the new State housing development around the re-located Hobart gaol at Risdon Vale, and others with fairly stereotyped estate-type housing on the relatively distant Howrah periphery of the Greater Hobart area.

It is not considered particularly relevant here to examine the detailed reasons, in so far as they are known, for variations in the strength of political affiliation among the Hobart population. Surveys have shown that about 80 percent of the population (at least in the dominantly two-party system) are unlikely to vary their party

allegiance,[7] and as many as two-thirds of the electors do not read party campaign literature or discuss the election with anyone.[8] An unpublished Tasmanian survey conducted in 1965 provided some explanation of the differential State-Federal affiliation of the electorate as a whole.[9] As sample areas were used it is not possible to indicate whether significant variations of attitude existed from subdivision to subdivision within Hobart. Nevertheless, apart from questions of weak or strong party images, it is clear that in Hobart of the 1950s and 1960s (though not northern Tasmania) a majority of the adult population has favoured the Liberal Party in matters affecting external security, national development and taxation, whereas in domestic issues the condition of education, the development of hydro-electricity, and a pro-worker reputation have maintained Labour ascendancy. In relation to the standard of efficiency of government at both levels it is not difficult to form views as to which is the more deserving of change, but given the nineteenth year of one and the thirtyfourth of the other one can only interpret that Hobart voting habits as revealed above favour the status quo.

Religion and Nationality

Before leaving the subject of Hobart's occupants two other characteristics of the population which are related to residential areas

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7 For example, in the last two weeks of the La Trobe (Victoria) 1960 by-election campaign 79.1 percent did not intend to vote differently from their 1958 vote, 7.8 percent had decided to switch, 1.5 percent were voting for the first time but were decided, and 11.6 percent were still undecided. From C. Burns: Parties and People, p. 105 (20).

8 Surveys of Political interest can show quite horrifying patterns of popular intelligence. One conducted in a South Australian shopping centre in 1965 among 250 people showed that 30 percent did not know Sir Robert Menzies' (then Prime Minister for 17 years) party, 48 percent did not know which party was in power federally, 80 percent had no idea of the number of seats in the State parliament, only 25 percent knew the name of their State member, and two-thirds admitted not the slightest interest in politics, anyway. From H. Mayer (ed): Australian Politics, p. 178 (21)

9 And, incidentally, evidence of a slightly greater awareness than the interviewees of footnote 8. The Premier was known to 97 percent, his party to 92 percent; the Leader of the Opposition to 75 percent and his party to 85 percent.

and political affiliation and which have differential spatial distribution should be touched upon. In 1954 8,545 of 23,331 European-born Tasmanians lived in Hobart and 5,259 of them were British. By the 1961 Census the proportion of European-born among the urban population had increased from almost nine percent to 11 percent, 5.9 percent British and 5.1 percent continental Europeans. This was significantly lower than for any other capital (Canberra had nearly 24 percent European-born) and a little higher than Launceston. As in the major cities, the immigrants of post-war arrival tend to concentrate in fairly well-defined areas, nearly always lower-value or- income suburbs. North Hobart has an accumulation of southern Europeans, particularly Italians, who operate a social club in Federal Street, and in Springfield (west of Moonah) central and eastern Europeans are concentrated. The Italian involvement in building and to a lesser extent automotive repairs is readily observable around the urban precincts, though a sample survey by Scott shows that the migrants of both North Hobart and Springfield are widely occupied in the city, in the Moonah industrial area, and at the Cadbury's factory.[10] The more numerous British migrants are not surprisingly better integrated throughout the urban community, with the southern suburb of Taroona providing the clearest concentration.

Hobart and Launceston have the highest Anglican proportions of any Australian cities, 48 and 44 percent, respectively, and among the lower Catholic representations, 21 and 17 percent. Although there are meaningful religious and perhaps social differences between religious adherence and church attendance the broad distribution of professing Anglicans and Roman Catholics shows some differentiation. The more numerous Anglicans show a considerable balance with population distribution from north to south, whereas the Catholic population is poorly represented in the southern suburbs

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10 P. Scott: The population structure of Australian cities, Geogr. Journ., 131, 1965, pp. 466-8

and strongly associated with North Hobart, Moonah and Glenorchy. Between the centre and the industrial north a weaker representation around New Town underlines the general tendency[11] for Roman Catholicism to be identified with lower socio-economic status. In Hobart, Methodists, the third religious group (about 8 percent of the population) in 1961 showed a strong central tendency, with a large proportion of total church attachment in the inner city and New Town areas. Random survey evidence indicates that this group, associated most with the lower middle-income areas, has given majority political support to the Liberal party at the Federal level, and to the Labour party in State voting. No such ambivalence is displayed by the Catholic church's adherents; who give less than 30 percent of their votes to the Liberal party both State and Federal, but who strongly underpin the third political group of any significance, the Democratic Labour Party. With half the voting strength the Anglican population can be expected to share their political support somewhat, and perhaps to have made a majority contribution to the groups in power. It seems likely, however, that Anglicans have voted rather more for Labour than for Liberal at recent Federal elections as well as in the State sphere where establishmentarian attractions are more obvious.

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11 Scott: op. cit., p. 472

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THE EVOLUTION OF HOBART

A Study in Historical Geography with Special Reference to Urban Fabric and Function, *circa* 1804-1963

by R.J. Solomon

Volume 2

Thesis submitted to the Faculty of Arts in fulfilment of the requirements for the degree of Doctor of Philosophy in the University of Tasmania

1968

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Part 4

Evolution of the city : 1847 - 1963

"Some force whole regions, in despite
O' geography, to change their site;
Make former times shake hands with latter,
And that which was before, come after;"

- S. Butler (Hudibras)

In the course of urbanisation the Hobart city-region maintained its location focus but considerably modified its site. A modest rate of growth, particularly in the second half-century of settlement, nevertheless permitted the fabric of earlier times to mingle with later building widely throughout the inner city. The timing of population increase indicates the course of development: from 21,000 in 1847 to 34,000 in 1901, 52,000 in 1921 and 110,000 in 1961.

A five-fold increase of urban inhabitants, though restrained by metropolitan standards, necessarily produces changes in the urban structure: in the composition and concentration of central city functions, in the penetration of residential areas by commercial and industrial activities, in the development of port facilities, and in the areal expansion of the urban entity. These matters and the changing distribution of inner city property values are examined with particular reference to the periods between the 1847, 1901 and 1954 valuations.

For reasons of time and space the suburban areas beyond the inner city (coincident with Sprent's Hobart) are not subjected to the same intensity of analysis as is the effect of their presence upon the core zone. With the passage of time and the decreasing novelty of Hobart's character and existence, the appraisal of contemporary chroniclers is increasingly replaced by reliance on 'official' records, both statistical and parliamentary, and at the same time previous studies of urban growth provide a more relevant base for comparative analysis.

Chapter 14

Population Growth and Urban Extension

The rapid rate of growth that characterised Hobart's population in the 1830s and which began to flatten out in the 'forties (Figure 5.1) was replaced in the next two decades by almost complete stagnancy. The urban total[1] of 24,454 at the census of 1857 had become only 25,004 (for the same area) by 1870, in which time the Tasmanian population achieved a modest increase from 81,492 to 99,328.[2] Although immigration continued, the rise of Victoria and particularly the blossoming of the goldfields offset the inflow by emigration. In the early 1850s the port of Hobart was involved in its busiest traffic ever, but many ships were arriving in ballast and departing with goods and migrants for the goldfields. In 1853 Tasmania[3] received almost 15,000 immigrants and lost less than 12,700 by emigration,[4] but few of the favourable balance could have added to the Hobart population. Launceston and Hobart were of course most exposed to the counter-attractions of Victoria, being more readily in receipt of news and having the means of trans-oceanic movement at hand. Rural areas were not immune from the prospect of mining profits, but many along the developing north-west coast, for example, found more dependable returns in boosting agricultural production to meet the rapidly growing demands of the non-agricultural population across Bass Strait.[5]

After 1870 the inhabitants of Hobart began, very gradually, to increase, but the twenty-year hiatus from about 1850 marked the

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1 Hobart Town plus the adjoining 'suburban' districts of Glenorchy (north) and Queenborough (south).

2 Statistics of Tasmania (1)

3 Soon to become officially so, and the name already "generally preferred by the colonists" and one "which their successors will certainly adopt" (West, p.3 (2))

4 Wood's Tasmanian Almanack, 1855, p.43

5 E.J. Parkes: Pioneering the Bushlands of The Mersey-Leven Interfluve 1840-1901 (4)

watershed between an era of growing importance, of established urban leadership in the southern territories of N.S.W., even of hopes for 'a modern Athens', and a period of multiple colonial development on the mainland, where Adelaide, Brisbane, Perth and Melbourne all faced their particular problems but all tapped substantially larger areas amenable to agricultural and mineral exploitation. With the opening up of the western slopes and plains beyond the Blue Mountains, Sydney had already shown that the few thousand acres around Pitt Water east of Hobart could no longer sustain the reputation or the necessary production for being the granary of N.S.W.

The cessation of transportation in 1852 after years of public opposition, not only in VDL but in N.S.W., South Australia, and Victoria,[6] removed a major source of labour and of population increase. In 1866 a petition of 935 signatories sought protective duties against manufactured goods from "much older countries than this" because "much distress exists among the Labouring and Artisan Classes, who, notwithstanding a great diminution in their numbers during the last 12 years, are not employed on an average above 6 months in the year"(5). Thus Hobart lifted its numbers only to 27,248 by 1881 while the island moved rather more positively past the 100,000 milestone to 115,705. But it was not until the second decade of the twentieth century that Hobart made a really significant recovery in the rate of population growth, its total being no more than 34,560 at the census of 1901. That is to say, in the half century from 1847 to 1901 the 21,467 people of the Hobart Town Police District increased by a mere 61 percent to become the 34,560 inhabitants of the very similar (but now more generally urban) area consisting of the Hobart, New Town, Glenorchy and Queenborough districts. By contrast, the half century from 1901 to the census of 1954 produced an overall increase of 275 percent with an average annual increase of 1.71 percent, just double the 1847-1901 average of 0.86 percent. As the absolute increase in residents was 13,000 on the one hand as against 60,000 on the other

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6 See, for example, J. West: The History of Tasmania, vol. 1, pp.276-318

Table 14.A

Population Growth 1847-1966, Hobart & Tasmania

Date	Hobart	*Average Annual Increase %	Tasmania	*Average Annual Increase %
1847	21,467[a]	--	70,164	--
1857	24,454[b]	1.30	81,492	1.49
1861	24,773[b]	0.32	89,977	2.45
1870	25,004[b]	0.10	99,328	1.04
1881	26,831[b]	0.64	115,705	1.38
1891	33,450[c]	2.20	146,667	2.36
1901	34,560[c]	0.33	172,475	1.62
1911	39,937[d]	1.45	191,211	1.03
1921	51,999[e]	2.63	213,780	1.12
1933	60,008[d]	1.19	227,599	0.51
1947	76,567	1.73	257,078	0.87
1954	95,206	3.10	308,750	2.61
1961	110,217	2.07	350,340	1.81
1966	119,415	1.60	371,217	1.13

* Simple average derived by taking period increase as percentage of period mean and dividing by number of years included.

[a] H.T. Police District

[b] H.T., Glenorchy, Queenborough

[c] Hobart, New Town, Glenorchy, Queenborough

[d] Metropolitan area (37,899 in area as for c)

[e] Hobart and suburbs (includes 33,156 in old city, 10,722 New Town and Queenborough, 4,482 Moonah, 1,470 suburban Glenorchy, 2,169 Bellerive and Lindisfarne)

Source: Statistics of Tasmania, Commonwealth Census

(and 75,000 by 1961) the implications for expansion of the urban area are clear. Figure 14.1 gives the approximate limits of urban occupance at specified dates, including the eastern shore which provides part of the metropolitan population from 1911. Considering the small addition of inhabitants, the area added by 1885 was quite substantial, but as with the 1839 area on the eastern shore, though less markedly, the density of settlement was low. The spatial coverage of this century, however, leaves no doubt as to the surface effects of more recent population growth.

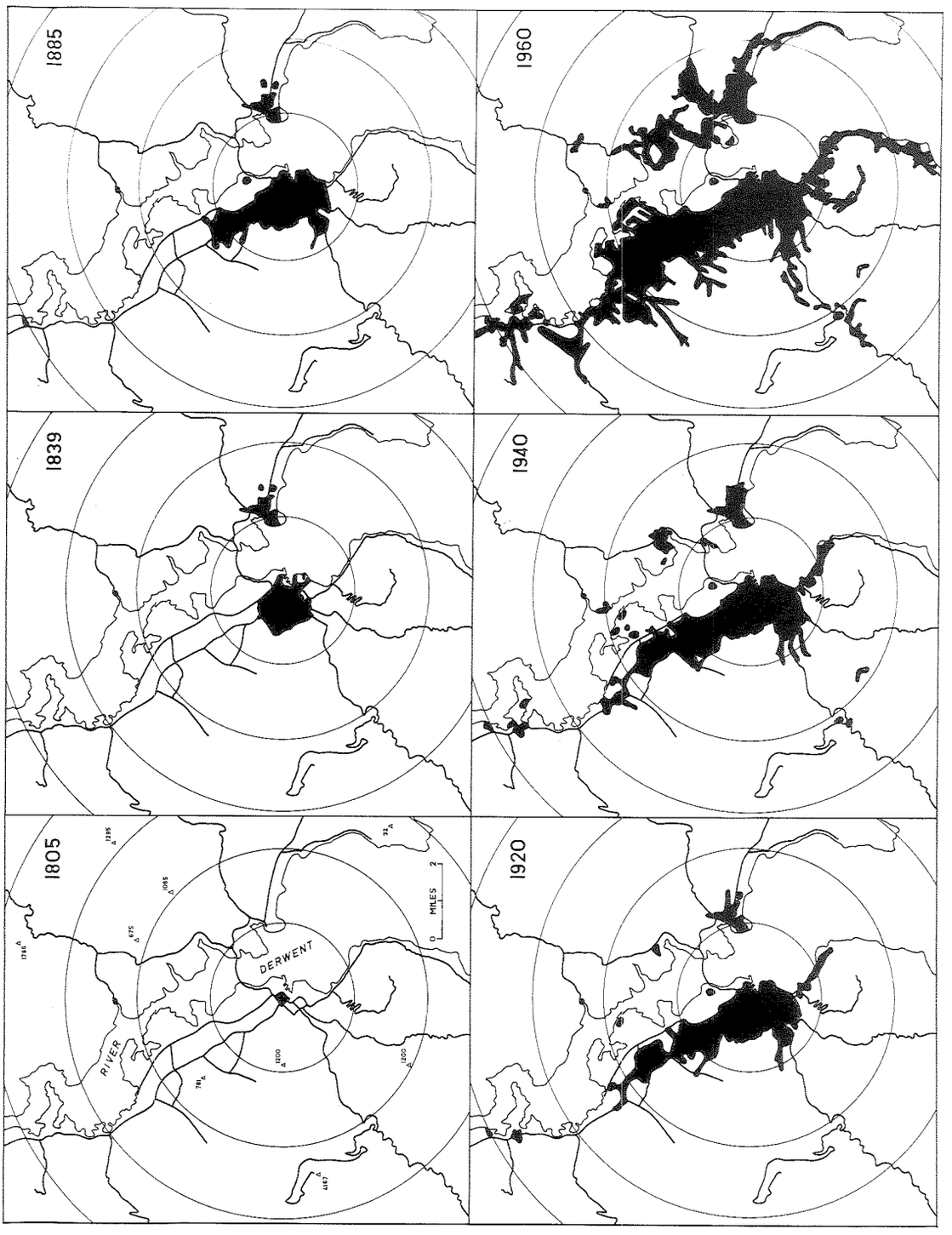

Fig. 14.1 Progressive expansion of Hobart's built-up area 1805-1960. Note the considerable proportion of the total area added since World War II. (Source: various period maps and plans)

Urban Growth: General Forces

The outward growth of the urban organism has long been recognised, more recently regarded as inevitable, and even conceived as ultimately disastrous. A leading historian believes that "the traditional view that the city appears or grows in response to favourable geographic conditions" describes the realities of modern urban growth "less and less."[7] But the extent to which Brogan subscribes to the importance of site and situation, particularly in relation to modern transport nodality, is earlier expressed: "Thus it is as certain as such things can be, that there would have been a great Australian city on Sydney Harbour." Quite properly he goes on to show discrimination in his environmental determinism, being "not quite certain" that the once largest city of the continent should have arisen on the "not divinely appointed site of Melbourne."[8] It is unnecessary either to agree or to join issue with numerous informed observers of world urbanisation on judgements of this kind (beyond noting that Brogan tends rather to be over-influenced in this case by the aesthetics of the site as against the topographic and economic advantages of situation). The difficulties of assessing the true balance of forces in explaining the relative size or success of individual cities are well known, but common responses and processes have been adduced from widespread examples to provide a general understanding without yet being able to prove the composition of any one mix.

As near the base as any are Colby's long-standing concepts of centrifugal and centripetal forces, the former consisting of those forces which "impel functions to migrate from the central zone of a city toward, or actually to or beyond, its periphery,"[9] and are comprised of attractive qualities beyond the central zone and restrictive or disruptive influences in it. Clearly the most

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7 D.W. Brogan: Implications of modern city growth, The Historian and the City, pp.160-1(6)

8 Ibid., p.153

9 C.C. Colby: Centrifugal and centripetal forces in urban geography, Annals, Assoc. Amer. Geogrs., 23, 1933, p.1 (7)

potent attractive force of all is land. Its supply is limited, while the capacity of people to aggregate seems unlimited. Even without population growth the changing economic capacity or living habits of the individual may result in demand for further residential land; with increasing population such demand is certain. The only alternative is higher density occupance at the centre, and that has at any point of time been subject to the absolute limitations of technology (in building), space (congestion and health), and economics (building and rental costs). Free land attracted the bulk of the free settlers to Australia's shores. Cheap land has attracted urban dwellers to the periphery of cities around the world and will continue to do so where a free economy exists. Despite the common protest that suburban land for sale is over-priced, the ultimate limits of the supply (if not the timing of its availability) are probably better known than for any other major commodity; it is as basic an example of the influence of demand on the price of supply as the writer can conceive.

The main attraction of land on the periphery is its very existence rather than its cheapness. Its cheapness is only relative -- to the usually much dearer land nearer the centre. The greater capacity of the more wealthy members of the community to buy new land has underlain the tendency of the high-rent residential areas to lead the way to the periphery, and gave rise to Hoyt's hypothesis of urban growth by sectoral extension along the most efficient transport routes and toward open country (8). Both this and Burgess's earlier hypothesis (9) of concentric zonal growth outward from the business centre assumed a single functional nucleus for the city, whereas Harris and Ullman (10) regard the CBD as only one of a variable number of district nuclei. Hobart's unusually attenuated form has given little support to the zonal and sectoral lines of development, though this can be more closely assessed in relation to differential functions in Chapter 15; but the growth of an industrial district beyond the mid-nineteenth century periphery points up the varying locational attractions which underlie

alternative forms of land use, together with the likelihood that manufacturing functions, almost equally with residential, will seek alternative location outside the central area.

We can expect to find a fair correlation of urban population increase with expansion of the urban area.[10] This need not necessarily be so for short periods of time. Population growth outside an urban entity may sustain and even stimulate certain of its functions without significantly increasing the work force or its dependents. Thus, while Hobart's numbers grew at a mere 0.17 percent per annum between 1857 and 1870 the State's population relatively burgeoned by 1.51 percent per annum. This may have had a useful effect on port activities, for instance. It is unlikely, however, that basic economic activities (12) -- city forming functions (13) -- will by their nature fail to stimulate population increase through simple additions to the work force, not to mention the further influence of the multiplier effect in greater or lesser degree.[11] For the long period of Hobart's areal expansion employment figures of sufficient precision or reliability [12] to explain the urban growth phenomenon are not remotely available, much less the detailed data of construction, conversion and site characteristics which enabled Hansen's fine distinction between residential extension (open site dwelling construction) and housing distribution in testing residential location models for modern Philadelphia, in what is probably the most refined analysis yet attempted (16). In any case, the intention here is to outline the general nature of urban extension beyond the colonial boundary as a prelude to examining the influence of growth upon the evolution of the central area.

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10 For quantitative substantiation of this apparently self-evident situation see E.N. Thomas: Areal association between population growth and selected factors in the Chicago urbanized area, Economic Geography, 36, 1960, pp.158-170 (11)

11 As Tiebout said, "the base is simply a modified form of an old economic concept, the multiplier" (14)

12 See Roterus and Calef's cautionary note: Economic Geography, 31, 1955, pp.17-20 (15)

Urban Growth: Particular Influences

In this respect two previous studies are of particular relevance in the light they shed on the inadequacy of current structure hypotheses as total explanations of urban growth. There are of course others, though surprisingly few in relation to the now vast urban literature. Of them, Smailes covers the field concisely and surmises that "it is reasonable to suppose that pre-urban alignments are often perpetuated, and that if these were known many apparently meaningless features could be explained."[13] The influence of deep narrow-fronted burgages on the physical character of building occupance, as in the back-to-back row houses end on to Alnwick streets, has been demonstrated by Conzen (18), and Smailes also has examined the bases of differential building arrangements as townscape components (19). The evolution of Istanbul's street pattern has been shown by Stewig (20) to result substantially from fires in the old city and consequent grid-pattern planning in place of the oriental street pattern of irregular width, inconstant direction, and interior cul-de-sacs. In his study of 23 New Zealand towns Powmall (21) found sectoral expansion a more suitable description of their superficial growth than concentric or nucleic hypotheses, with underlying influence most strongly coming from surface configuration and transport provision. The findings of Fellmann (22) and Ward (23) might be summarised. In studying the subdivision and sale of a 25 percent area-sample of Chicago land from 1831 to 1953 Fellmann found :-

1. A high temporal correlation between the establishment of outlying settlements and immediately subsequent subdivision. Within ten years of establishment of the population clusters 34 percent of associated land was sub-divided.

2. Local mass transit lines were much more effective in localising allotment sales than in stimulating initial subdivision.

3. Both subdivisions and sales were greatly influenced by

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13 A.E. Smailes: The Geography of Towns, p.101 (17)

economic fluctuations. Subdivided land was so over-supplied during the boom of 1865-72 that no new subdivision occurred for 20 years.

4. Lot sales nearly always lagged substantially behind subdivision. In 1875, 63 percent of Chicago land had been subdivided, only 21 percent had been sold. More usually, a lapse of ten years saw the largest block of territory pass from subdivision to re-subdivision or to sale.

5. Individual lot sales, "though the final stage of land preparation prior to building", showed little affinity for the three conceptual versions of urban growth. Initial subdivision, or re-division to lots, showed more tendency to concentric and sectoral distribution.

In dealing with Leeds, with about five times Hobart's population (as against Chicago's 50 times), Ward clearly established that:-

1. The characteristics of pre-urban land holdings -- location, size, shape -- significantly influenced the urban plan.

2. Fragmented ownership and small holdings (usually less than five acres) produced terrace housing, and variations in street and house alignments clearly coincided with pre-existing property lines.

3. Larger holdings provided more regular building form, wider spacing, and greater continuity.

4. Conditions of sale or lease are often highly individual, involving covenants, conditions of building, and "whimsical decisions of estate developers which frequently are not only unrelated to the original cadestral pattern but also to the general current economic and social pressures."

5. The concentric, sectoral and multiple-nuclei concepts of urban structure do not include "the conditioning influence of the pre-existing pattern of ownership."

The general conditions of Chicago's settlement might be expected to hold more promise as a model for Hobart's expansion

than those of Leeds. Chicago's urban extension was into a newly settled landscape in the early nineteenth century; Leeds expanded into closely settled rural surrounds with a complex pattern of ownership. On the other hand the rate of Chicago's growth into one of the leading million cities of the world is in no way common to Hobart's experience. In fact, followable as the guidelines appear, two facets of settlement in the Derwent area tend to block the way and to show Hobart as a poor predicter of the directional tendencies of urban extension. One is the almost over-powering constraints of surface features, the other is the rapid disposal of pre-urban land by grant. The close parallelism of hills and drowned arm of the sea is now familiar (see Figures 1.1 and 14.1), but deserves reiteration. The juxtaposition of the estuary and hills of 1000 feet within one mile, two at most, between Taroona and Glenorchy, all flanking Mt. Wellington's 4000 feet just five miles in direct line from Sullivan Cove and Sandy Bay, has effectively confined the direction of extension to about 60° of arc northward, and less southward. The only alternatives have been confined extension up tributary valleys, and leaping the water barrier. Although a loose nucleus of settlement existed at Kangaroo Point from the early nineteenth century and regular ferry contact was established with Sullivan Cove, the intervening mile of water was far too serious a locational disadvantage for the catalyst effect of Chicago's outlying nuclei to operate -- at least until the permanent bridging of the river in 1943 allowed the pressure on western land to find release there, since when the rate of growth has strikingly increased.

Pre-Urban Land: Availability and Accessibility

The disposal of land in substantial grants within a short distance of the built-up area -- including Battery Point's subdivision between Knopwood's 30 acres and Sorell's 90 (see Figure 7.18) -- meant the early loss of government control over most of the

potentially urban land, and possibly less predictability of release for suburban building than if it had remained Crown Land. The point is debatable, however, for evidence elsewhere and of Hobart in more recent times strongly suggests that most landholders if not actively seeking profit succumb to speculative influence well in advance of building space requirements, whereas administrative decision to hold or release land is less responsive to market pressures. The distribution of Crown and Reserve land within five miles of Hobart in 1850 (Figure 14.2) leaves little doubt as to the state of affairs as between private and public ownership.[14] Only in its military and defence requirements had significant tracts of land within the town boundary been reserved by Government. The small release of land after 1857 and particularly after 1861 substantiates the position. In three years, 1857, 1859 and 1860 (no sale in 1858) 147 lots covering 64 acres were sold for £19,296 (about £300 per acre). From 1861 to 1878 inclusive, with no sales in three of the years, a total of 48 lots were sold. They amounted only to 19 acres and brought the lesser sum of £5,252, which included what must have been a very desirable central allotment of 29 perches (0.18 acre) for £1,600.[15] For more than a decade after 1878 there were no allotments released for sale in Hobart Town at all. Thus the extension of urban occupance beyond the colonial boundary was potentially haphazard, but subject to the strong surface configuration including both relief and land-water relationships, and to the general economic constraints which favour contiguity of construction in relation to the cost of services and the friction of distance (24).

In fact, there is little evidence of discontiguity in the whole of Hobart's urban extension to date; only the mountain-site

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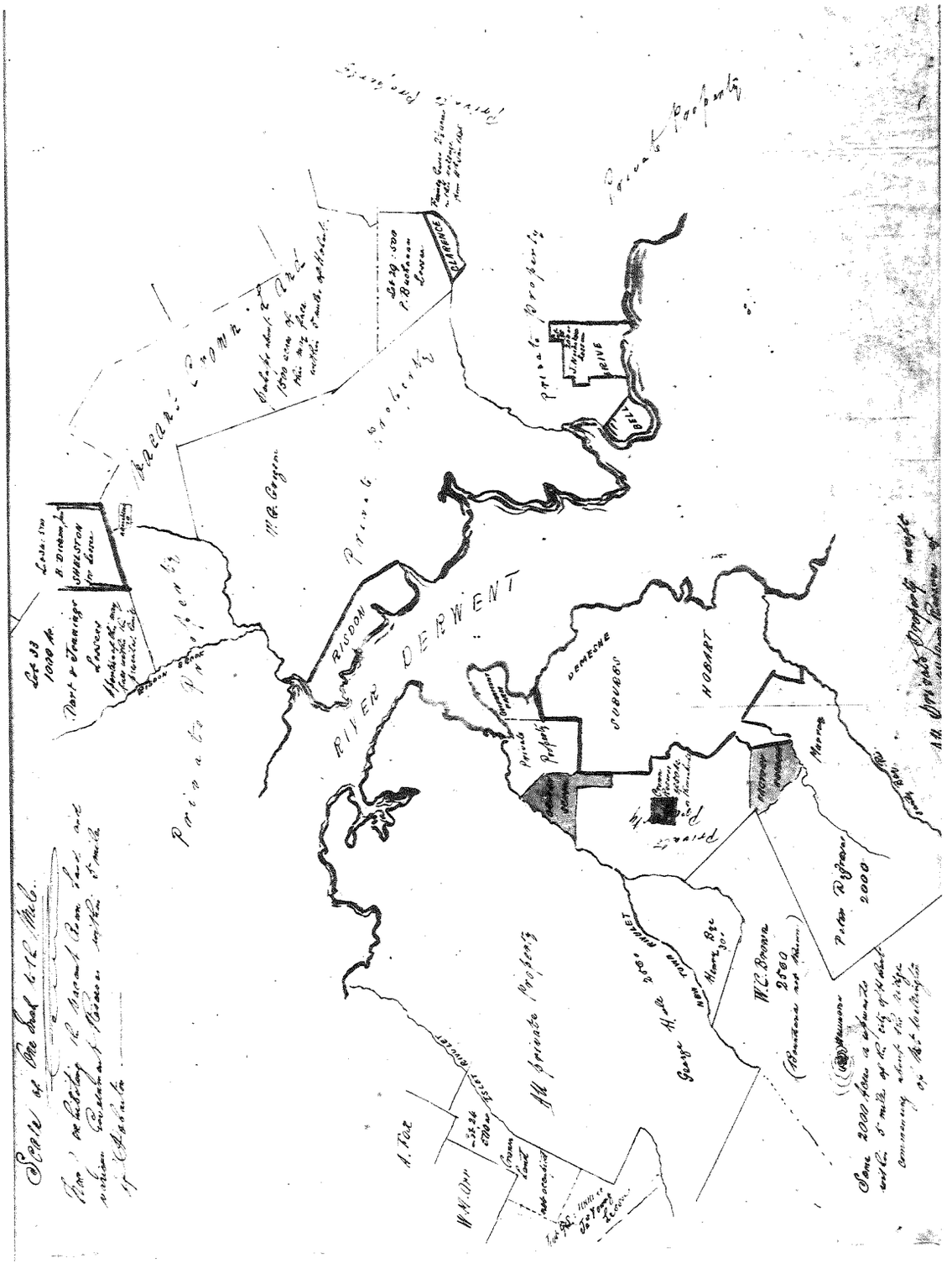
14 The fact that much of the land in the sketch is prohibitively steep for residential development does not affect the relative condition.

15 Statistics of Tasmania, Return of Town and Suburban Allotments sold during the Year, 1857-1878.


RIVER DERWENT
RISDON
HOBART
SOUTH HOBART
CLARENCE
Private Property
Private Property
Private Property

villages of Ridgeway, Ferntree, and Mt. Nelson and the governmentally located Risdon Vale suburb of contemporary vintage have broken contact with pre-existing occupance. And adjoining the developed zone there are still a few areas such as the flanks of Mt. Nelson which are being sold off as the spirit or the market moves by descendants of the founding population (original grantees). Doubtless this illustrates the slowness of Hobart's overall growth after its palmy colonial era, but these things are a matter of degree. Considering the inhibiting forces of penal foundation and the limiting effects of Cinderella statehood, Hobart's protagonists might be forgiven for matching the observations of larger urban entities: "At the beginning of the nineteenth century the urban agglomeration of Tees-side did not exist...yet in little more than a century this rural scene has altered beyond recognition"[16]; and: "From a cluster of tents on the foreshore of the Waitemata Harbour in a hundred years Auckland has become a national metropolis."[17] Such is the process of urbanisation.

The relative inaccessibility of the eastern shore introduces one other factor in urban extension which is never inconsequential and is usually assessed to be vital. Transport looms large in contemporary community economics, as Clark (27) and many subsequent authors have shown.[18] While intra-urban transport as such was probably less important and certainly less newsworthy a century ago, access has always been fundamental. Any site is useless if it

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16 R.H. Best: The urbanisation of Tees-side, Planning Outlook, 5, 1961, p.15 (25)

17 L.L. Pownall: Metropolitan Auckland 1740-1945, N.Z. Geogr., 6, 1950, p.107 (26)

18 Not a few despair of the continuing viability of the city in the grip of the automobile. Lewis Mumford (28) views with horror the desecration of the 'traditional' city of easy (largely pedestrian) circulation. Boulding (29) describes Los Angeles as "an agglomeration created by and poisoned by the automobile." The writer is reminded of the occasion in 1963 when, viewing the arid townscape of Figure 10.23 from Los Angeles Civic Centre, the caretaker of the building impressively expounded the shortcomings of a city almost lacking in public transport and engulfed by parking lots, and offered his house in Pasadena for the writer's in Tasmania, "sight unseen."

cannot be reached, and the more easily it can be reached the more likely (other things being equal) it is to be utilised. Mayer's (30) two facets of accessibility, proximity and transportation, are relevant. The greater is overall proximity the less is the need for transport as a service, and in a small town the provision of internal transport may be almost confined to goods transfer and delivery. But even Hobart's colonial size was sufficient to draw Stoney's comment (in Chapter 1) concerning the disadvantages of hilly streets in a trading town. Fellmann's study showed some influence of inter-city routes on the rate and direction of subdivision but that they had little effect on lot sales; local public transport lines were, on the other hand, more effective in stimulating lot sales than initiating subdivision. This is in keeping with the logic of the situation: wider ranging, through-routes leading people outward to appraise the unused or extensively used land of the rural-urban fringe and beyond, local streets providing detailed access to this tract or subdivision rather than that. Ward's work on Boston and Leeds (31) clearly demonstrates the association of suburban growth with mass transit development, the influence of which on land values has been well established by Hoyt and others. The proliferation of street intersections was used by Borchert (32) in following the course of urbanisation in Minneapolis - St. Paul, and altogether there is ample empirical evidence of differential expansion in relation to transport provision.

Hobart provides poor environmental circumstances for adding to this evidence, and is so far removed from the ideal state of the uniform plain which is the model-builders' Mecca that a detailed historical analysis of transport lines is considered unwarranted. The surface configuration which holds most settlement to the lower ground has equally restricted the access routes. The basic road-pattern of 1960 recurs on the frames of Figure 14.1 to show how little suburban extension has deviated -- has been able to deviate -- from it. The main northern road was the only

Fig. 14.3 Mission ferry course above the two proper. Notice, from the Derwent Inn (Tasmanian Museum collection).

Fig. 14.4 The Florentine Suburb Bridge, constructed between Davidson and Montagu Points in 1943, with the concrete arch of the replacement Bowen Bridge spanning the western shore in 1963. (Dale, Lesida photo)

Fig. 14.5 Horse carts and tramcar in Elizabeth Street (just south of Liverpool) circa 1900 (Tasmanian Museum collection).

Fig. 14.6 Livery stables and offices in 1899 on the Elizabeth Street site soon to be occupied by the G.P.O. (Tasmanian Museum collection).

significant through-route for the whole of the urban history, joined fairly early by the southwestern outlet of much lesser importance. Access to both north and east was via Austin's Ferry (on the eight-mile radius at the edge of the map) so that the eastern route (Tasman Highway) now followed by the Warrane housing development has assumed remotely comparable significance with the northern outlet only since the bridging of the estuary (Figures 14.3 and 14.4). Several roads leading west either climb to the top of the relief (Mt. Wellington, Mt. Nelson) initially more for scenic purposes than for residential extension, or, as in the middle section, end on the flanks of the hills.

There is no doubt that the Hobart-Launceston connection stimulated the prime northward spread of urban occupance, but the one outlying local settlement, New Town, was already on that course and any assessment of spatial and economic considerations must have seen that as the major directional possibility. The single railway connection, established in the 1880s, closely followed the northern highway after skirting the Domain to seaward, and it remained for the beginning of industry after World War I (Figure 14.1, frames 1920, 1940) and the addition of the Brooker Highway after World War II (frames 1940, 1960) to draw residential occupance generally toward the shore from the main road. Within the city limits double-deck tramcars of the kind in vogue for the first half of this century were necessarily confined to the less abrupt gradients such as those of Elizabeth Street (Figure 14.5), Liverpool Street, and Macquarie Street (Figures 15.19 and 15.20). The general employment of the horse was widely evident in (and on) the streets, and at the turn of thecentury the site soon to be occupied by the GPO included a livery stable (Figure 14.6). The carts and cabs (Appendix XXIV) might have had improved traction over the tramcars, but it is clear that for most of Hobart's history, until the general advent of the automobile, hilly localities such as those in West Hobart

HOBART TOWN

THE LIMEKILN RESERVE

Lots For Sale at Hobart Town. Thursday 29th December 1864

Upset Price of each Lot £20

Section O.2.

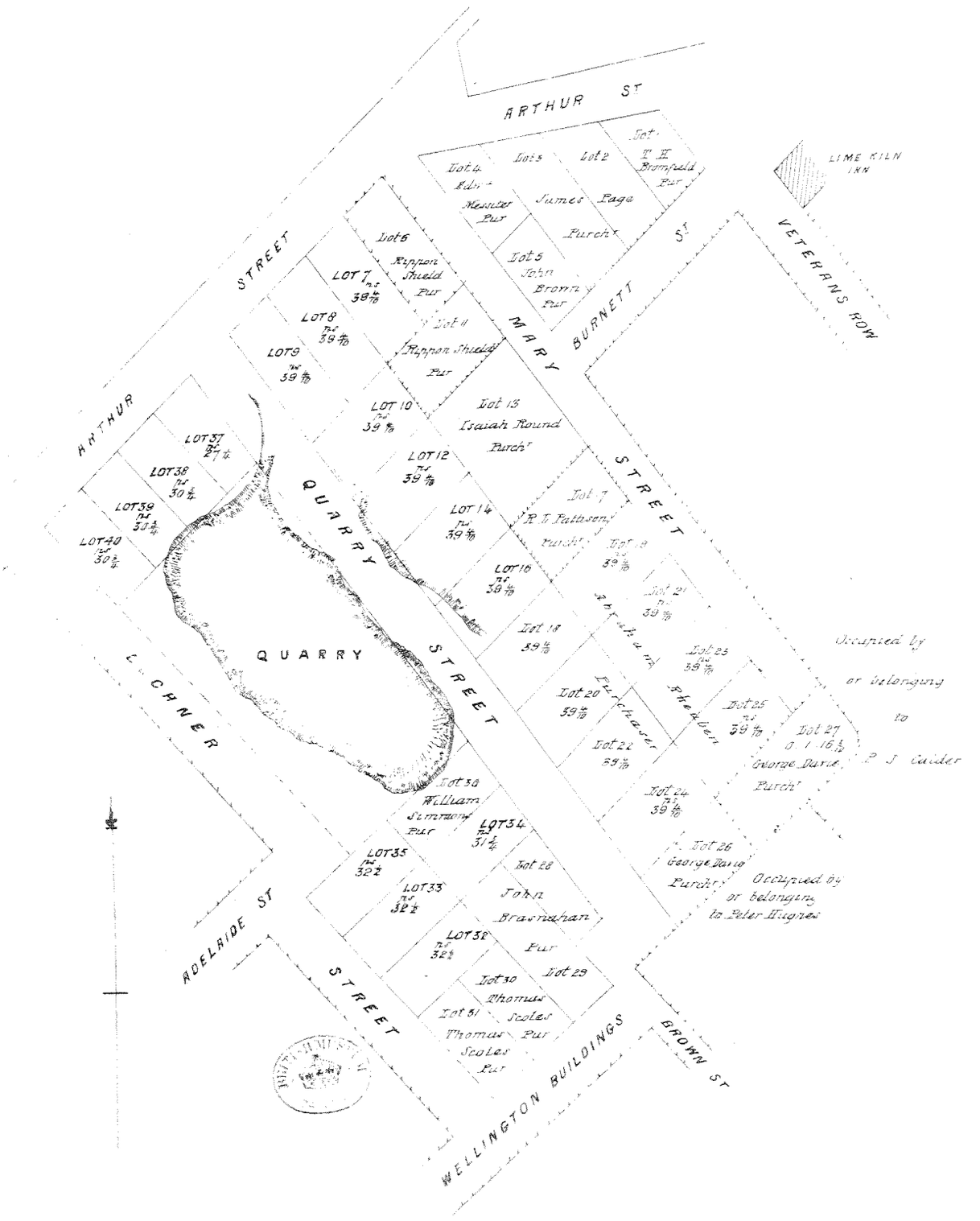

Fig. 14.7 Allotments for sale near the northern boundary of the colonial town in 1864 (92492 (15), British Museum)

must have been at a disadvantage compared with nearer or more easily accessible areas. Property values seem to support this construction.

The Trend of Hobart's Extension

Given land allotments, access, and buyers, the pre-conditions of urban extension seem to be met. Hobart's defined town lands of the 1840s were not completely taken up either at Sprent's survey (Figure 1.3) or at the 1847 valuation (Appendix V). The nearer subdivisions were likely to be occupied first, and in Figure 14.7 is shown the area around the Arthur Street limestone quarry[19] (Block 40) offering the balance of 40 lots mainly under 1/4 acre for the upset price of £20. This was a government reserve, and already individual lots purchased (not combined under one purchaser) exceeded the 17 Crown lots of about six acres sold in 1864.[20] By 1866 the area was not appreciably built upon (Figure 14.8), though after 1901 Adelaide Street (then Hamilton Street) was extended through what had been the southern end of the quarry to join Quarry Street (now Browne Street), and a few houses and a small park were added. Some extension of urban occupance, not merely of subdivision, is apparent in the plan of 1866, notably beyond the northern and southwestern limits of the colonial town. However, between the census of 1861 and that of 1870 the Hobart Town area lost over 600 male population and it was only by an increase of females to 10,000 -- 1,000 in excess of males -- and by small increases in the southern and northern 'suburbs' that the wider urban area maintained its earlier total (Table 14.B).

By about 1890 the town had thoroughly broken its colonial bounds, as shown in Figure 14.9. The title 'Hobart Town' had

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19 Production 20,154 bushels in 1842 (Statistics of VDL, 1842, CSO 50 17, pp.362-3)

20 Statistics of Tasmania, 1864, p.84

Fig. 14.9 Hobart and suburbs circa 1890, from New Town Rivulet to south of Sandy Bay Rivulet (Hobart No. 106, Lands & Surveys Dept.).

been dropped and at the censuses of 1881 and 1891 populations for Hobart City were given. That area in 1891 was composed of the electoral districts of North, South and West Hobart as defined on Figure 14.9. Beyond them were the municipal and police districts of New Town, Glenorchy and Queenborough which were all combined to make the registration district of Hobart. The distribution of population in these areas in 1891 is presented in Table 14.B with figures as comparable as possible for the four previous census periods. It is evident from the 1881 break-down of the City population that despite increasing occupation of the incompletely developed sections of the colonial and immediately adjoining areas, and despite (or because of?) the concentration of commercial and other non-residential functions at the centre, the population total there was comparable with that of any other district, enabled by density more than twice the next highest. Population density of 25,000 per square mile over one-fifth of a square mile is a 'respectable' urban density by most standards of the time; it has required the development of high-rise apartments far in excess of Hobart's almost ubiquitous two-storey limit to provide densities of two, three or more times that order. However, respectability does not appropriately describe all the social conditions which made for high central density. Forty persons per acre can be easily accommodated in row or semi-detached houses in purely residential areas, but detached cottages mingled with business, manufacturing and other central premises imply less desirable conditions. While alignment of dwellings to the street frontages was fairly general, interior residential units persisted at least until the 1901 valuation. In Figure 14.8 buildings without street frontages are common, particularly at the eastern end of town near the mouth of the rivulet. The appearance of this vicinity in Figure 14.10 indicates the need for improvement to essentially slum conditions.

Low density living of the kind offered in the New Town district, South Hobart (Figure 14.12), and the suburban beginnings of Sandy

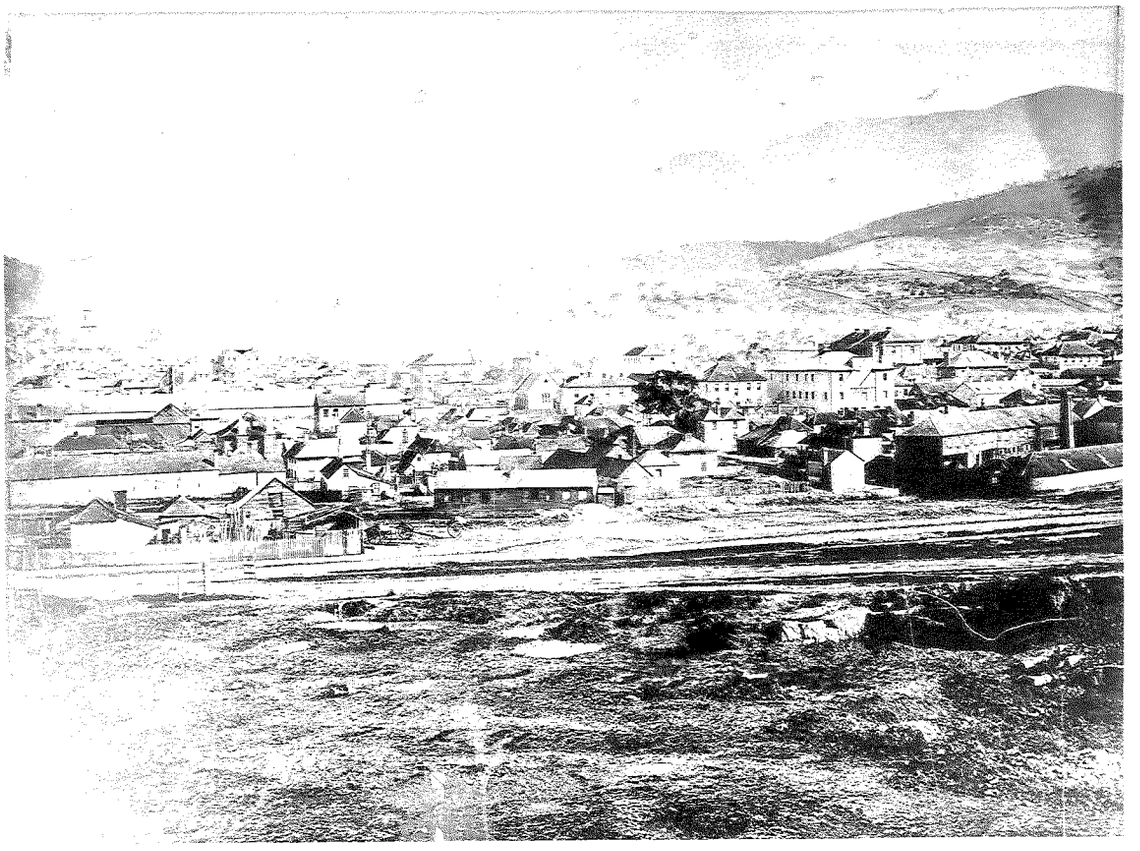

Fig. 14.10 Building congestion near lower Park Street, at the eastern edge of the central city, circa 1860. (Tasmanian Museum collection)

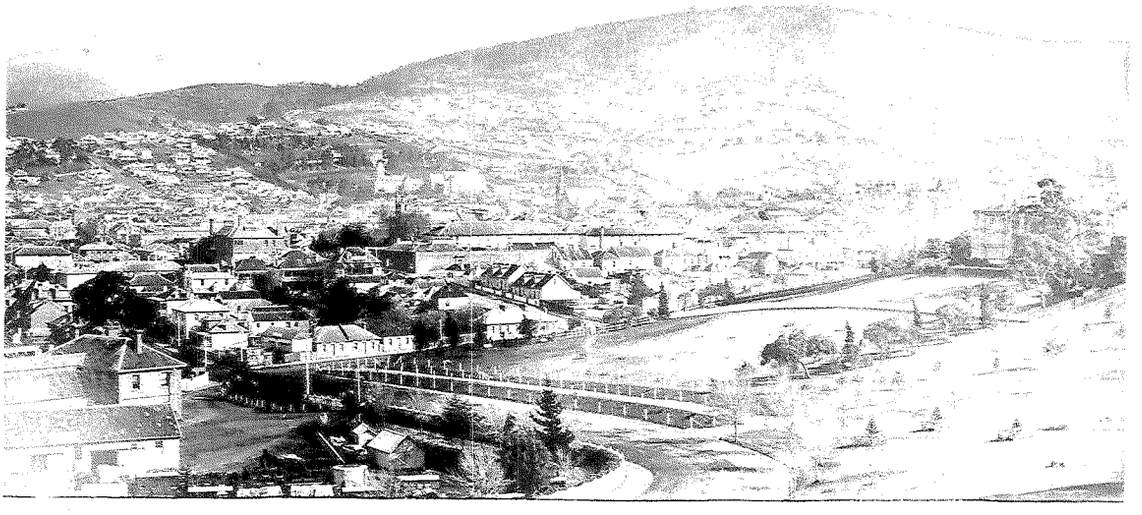

Fig. 14.11 Westward from the lower Domain to Knocklofty, circa 1880. The eastern edge of the city has been improved since the previous view. The gaol, previously the convict barracks, runs across the centre of the photograph. (Tasmanian Museum collection)

Fig. 14.12 Late nineteenth century view from the South Hobart urban periphery toward the city. The viewpoint looks over Wentworth Street and the site of St. John's hospital to Macquarie Street.

Fig. 14.13 Nearer Sandy Bay from Knopwood Street, Battery Point, above the mouth of the Sandy Bay Rivulet. The slopes to be occupied by suburban Dynnyrne and Mt. Nelson are still farmland in this early twentieth century (estimated) view.

Bay (Figure 14.13) -- Quayle Street beside the Sandy Bay Rivulet and below the St. George's Hill escarpment was subdivided in 1885 -- must have been an attractive alternative to inner congestion. Although in 1884 the Sandy Bay Rivulet reservoir (in the southern corner of Figure 14.9) had a 45 million gallons capacity coupled to 13 miles of aqueduct and main and 60 miles of urban reticulation,[20] sewerage left vast room for improvement and the Land Commissioners' concern sixty years earlier with elevated and airy sites was still pertinent. (Appendix XXV.) There was indeed no doubt that the area between Victoria Dock, the New Market and the lower course of the Town Rivulet was neither elevated nor airy.

The extension of streets beyond the 1840s town freed the pattern from whatever residual control Macquarie's plan and chosen locations still exerted. Already the West Hobart pattern owed nothing to these earliest guidelines, and now on the hilly side of the Domain the Bishop's Glebe was turned over to residential development, proximate to the centre, but with small allotments and never high-value; South Hobart spread along the interfluve of the two southern rivulets towards the Cascades Asylum (once the female penitentiary which replaced the inadequate Murray Street gaol factory) and the long-standing Cascade Brewery of earlier public concern in regard to water rights; and in the north the main road, and the railway, reached the first area of free settlement at Risdon Road, near the New Town Rivulet, New Town Bay and the new Government Farm adjoining the finely architectured St. John's Church and orphanage. It thus took over three-quarters of a century for the urban amoeba to establish continuity of occupance by spreading its form over the 2 1/2 miles necessary to engulf its daughter settlement in any really urban way. Even then the low density occupation of 305 per square mile in 1891 might, as comparison of Figures 14.14 and 14.15 suggests, more truly be regarded as rural rather than urban. Further north, that part of the Glenorchy district not now incorporated in New Town

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20 Statistics of Tasmania, 1884, p.275

Fig. 14.14 Lightly scattered, pre-urban settlement at New Town. The northern slope of the Domain is at the rear.

Fig. 14.15 Suburban occupance in Moonah - New Town behind New Town and Cornelian Bays, 1967. The first free settlers occupied an area at left centre of the scene.

provided population included as Hobart urban since the mid-century, at less than 50 persons per square mile. The average density is made deceptively low by those parts of the district still unoccupied; nevertheless the rural-urban fringe is the highest status (from the urban viewpoint) that this area could claim. Likewise in the south the suburban blocks and street pattern from the Sandy Bay Rivulet to Lord Street (Figure 14.9), covering little more than one-quarter of a square mile on both sides of High Street (now Sandy Bay Road), contained most of Queenborough's 2,224 people in 1891. Twentieth century extension along the narrow estuarine foreshores would more fully convert Lycett's landscape of 1825 (Figure 14.16) to the townscape of the 1960s (Figure 14.17). If the result was less thorough-going than some other of the world's urbanised landscapes, perhaps most notably the Californian example presented by Thomas (33) and described as the first "state city",[21] the processes are undoubtedly the same, in kind if not in degree. Before examining the effects of urban growth on the urban core the major stimulus for continued northward extension of urban occupance must be briefly explored.

Industrialisation and Northern Emphasis

Very few cities have reached populations of 100,000 without developing a firm industrial base. Washingtons, Oxfords and Canberras are unusual in substituting strong administrative, educational or service functions for more balanced employment structures, and even centres such as these may take on a moderate manufacturing role -- Oxford, for example (34). Nelson found that manufacturing engaged 27 percent of the labour in 897 American cities of over 10,000 people, that no city was without some manufacturing, and that one-tenth of the cities had over 50 percent of their work-forces in manufacturing (35). Whether or not a city is designated a 'manufacturing' city by some

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21 K.E. Boulding: The death of the city: a frightened look at postcivilization, p.143 (29)

Fig. 14.16 The Derwent Entrance and Sandy Bay Reach leading to Battery Point and Hobart Town, from Mt. Nelson, 1833 (Lycett drawing, from Dr. D. Craig's collection).

Fig. 14.17 Hobart City and environs from Mt. Nelson, 1833

necessarily arbitrary standard of classification[22] is not the concern here. Rather, the urban growth potential of industrial activity is the telling feature. One factory job may through the multiplier effect provide five or more new workplaces in the community; one personal service may add only itself. In reverse, "Local recessions do not start because of layoffs in the retail sector. Usually it is the manufacturer's business which folds, causing a downturn."[23]

Before World War I Hobart possessed numerous small manufacturing concerns and hardly any large ones. With few exceptions they served the basic consumer needs of the resident population or the maintenance requirements of other operations. The establishments were characteristically small and differed little from the contemporary shops (Figures 14.18, 14.19). Employment was similarly in small units. At the 1901 valuation the 159 factories of the inner city were assessed as double the value of the average dwelling and slightly less than the average warehouse. In all, city-serving rather than city-forming functions. The establishment of the Electrolytic Zinc Co. of Aust. in 1916 on a waterfront site opposite the original Risdon settlement began a new era. From this base an industrial sector, small by major-city standards, but of comparable order with Hobart's size, was built up, and the nucleus for the attraction of suburban population was implanted. Cheap bulk supply of electric power from the newly developing hydro-electric system was the key attraction, although others connected with site and production, which have been discussed in Chapter 11, were important.

Apart from the next largest single addition, the Cadbury's chocolate factory, similarly exporting most of its product, the rounding out of Hobart's larger manufacturing sphere was linked to the post-World War II establishment of the Derwent Park complex.

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22 The inherent dangers of which are well illustrated by Smith's enigmatic categorisation of some Australian towns (36)

23 C.M. Tiebout: The urban economic base reconsidered, Land Economics, 32, 1956, p.98

Fig. 14.18 Draper's shop, Elizabeth Street, 1900 (Tasmanian Museum collection).

Fig. 14.19 Perambulator and basket manufactory, Elizabeth Street, 1900 (Tasmanian Museum collection).

While these firms were in combination not nearly so oriented to extra-Tasmanian markets as Electrolytic Zinc, Cadbury's and the long-standing Jones & Co. of Hunter's Wharf, they underpinned constructional works associated with population growth which they themselves had helped stimulate. Although area of residence and area of employment are not always coincident (as instanced by Figure 11.18) the association of government housing areas (Goodwood, Chigwell) with the northern Hobart industrial zone has made for considerable connection between the industries concerned and the surrounding population; political affiliation confirms the point. The influence of northern manufacturing on residential development is therefore most simply expressed in the growth of population in Moonah and Glenorchy from 3,393 in 1911 to 9,898 in 1933 and 35,682 in 1961. These increases of 193 percent and 260 percent for the respective intervals should be compared with the rates of 50 percent and 84 percent for the remainder of the urban area.

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Chapter 15

Inner Area Functional Change

Published case studies of comparable urban entities through the span involved here tend to be short period cross-sections of limited functional content. Robinson's of Sydney (1) is probably the most relevant exception, while Dunedin (2) and Auckland (3) at the turn of the century are of obvious interest. In an unpublished paper Johnston (4) examines land use changes in Melbourne's CBD over the past century, providing evidence of the changing number of functional units (though not their specific distribution) which is of comparative value.

Based on economic theory of urban land use such as Ratcliff's (5) and numerous geographical or economic analyses of mainly contemporary central city functions (6, 7, 8, for example), the general proposition has developed that city growth must bring about the decentralisation of certain functions, increasing segregation of those within the central area, and thus the rearrangement of uses in relation to some point of reference such as the peak land value intersection. Horwood and Boyce (9) propounded the concept of a maximum-access 'core' of dominantly retail composition, surrounded by a more variegated, less personally oriented 'frame'. It is not the present concern to elaborate these concepts or to delineate the changing limits of a CBD by some chosen standard of definition, but rather to find the nature of changes in functional composition over a longer time-span than has normally been embraced, with consequent reflection upon the formulated view of what should happen in the process of urban evolution.

Hobart: City Beginnings

Before examining the inner urban change which accompanied Hobart's growth of population and extension of area from the mid-nineteenth to the mid-twentieth century Butler Stoney should be

allowed to set the stage with the best description of the city in its earlier phase.

"For a city of but fifty years growth, none ever equalled Hobarton in beauty, on a first view. Yet on a nearer inspection, it is found to have many defects; the very irregularity of its streets, which adds so much to its beauty, is a sad drawback to the convenience of trade, to the cleanliness of the city, and to the general comfort of its inhabitants;... ...the stranger who enters its streets has reason to be disappointed, and cannot fail to remark a lack of order and cleanliness. When one considers the means which during fifty years were at the command of the rulers of Tasmania, and the immense amount of convict labour ever at their disposal, it was a matter of surprise that the sideways remained so long unflagged, -- that there was no sewerage of the town, -- and that an open creek, still in its original state,... should have been allowed to remain as a receptacle for every nuisance, with imperfect bridges over it, and...after heavy rains, to threaten the city with an inundation most destructive to life and property. ...When we look at...the daily increasing importance and general wealth of the community, we have a sufficient guarantee that...the interior of the city will correspond to the extreme beauty of the bird's-eye view.

Our prognostications relative to the interior of the city have been indeed already realized [1856]; for it has assumed a new appearance: -- flagged side paths have been made through every street, -- a general sewerage is in progress, -- a gasometer partly built, and gas pipes laid through the city. ...also a bill brought in for the purpose of surveying a suitable line for a rail-road to Launceston. Considering the wealth of the inhabitants of Hobarton, and the vast internal resources of the country, with such a spirit of improvement abroad, we may venture to assert that Hobarton will eventually rival any city in the south." [1]

Stoney could not have known of the hiatus in population growth which was at the point of occurrence. Great activity was to be seen in the port and general construction was in train. In fact it was true of the half century that more public works and, less certainly, private building were carried out than the slow population increase seemed to deserve. It might be remembered, however, that times of economic recession are conducive to employment in public construction projects, and that the very check to an otherwise consistently enlarging body of inhabitants enables some equally consistently lagging services to catch up.

Change in Functional Composition 1847-1954

Although the second half of the nineteenth century in Hobart was a period of economic difficulty and slow population growth,

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[1] H.B. Stoney: A Residence in Tasmania, pp.11-12 (10)

greater change in central structure took place then assumed by Scott from less detailed evidence,[2] and within the colonial area population change was greater between 1847 and 1901 than between 1901 and 1954. The indicator for this comparative situation is the number of residential units at the three dates under review: 2473 in 1847, 4133 in 1901 and 4865 in 1954. These rates of change were by no means typical of other elements in the functional structure, as Table 15.A. shows. Shops, offices, factories, public buildings

Table 15.A

Change in Functional Components of Inner Hobart

Period	Shops	Ware-houses	Hotels	Offices	Fact-ories	Public bldgs.	Resid-ences	All Functions
1847 Number	541	62	152	32	32	31	2473	3337
% of total	16.2	1.9	4.6	1.0	1.0	0.9	74.1	100
1901 Number	626	126	93	174	159	34*	4133	5581
% of total	11.2	2.3	1.7	3.1	2.8	0.6	74.1	100
1954 Number	751	222	52	638	242	72	4865	7164
% of total	10.5	3.1	0.7	8.9	3.4	1.0	67.9	100
1847-1901 Change in no. (%)	15.7	103.2	-38.8	443.8	396.9	0.6	67.1	67.2
1901-1954 Change in no. (%)	20.0	76.2	-44.1	266.7	52.2	111.8	17.7	28.4
1847-1954 Change in no. (%)	38.8	258.1	192.3	1893.8	656.3	132.3	96.7	114.7

* under-stated

Source: Assessment Lists 1847, Roll 1901, Roll 1954/55

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2 P. Scott: Hobart: an emergent city, p.21 (11)

(and banks and halls - see Appendix II) all made greater absolute and usually greater relative increases after 1901.[3] The distribution of these will be examined below.

Distribution of Functional Units 1901

In the same manner and from the same data source as for 1847 and 1954, the functional components of inner Hobart in 1901 have been plotted (Appendix VI). The 19 central blocks shown in Figures 3.1 and 11.1 appear with their functional units of 1901 in Figure 15.1. The share of the major functions in the property valuations of the blocks is indicated in Table 15.B. Expectedly, many of the characteristics were transitional between the 1847 and 1954 situations as Figure 15.2 clearly shows. The residential element of the shop-and-house unit was disappearing from Elizabeth Street south of Bathurst and from Liverpool Street east of Murray, but beyond these lines, particularly in Liverpool between Murray and Harrington, the composite feature was conspicuous. In other words, the competition for central land had begun to force the non-earning residential function from the main block and facing frontages by this time, but the pressure was not yet sufficient to make a similar change even two blocks from the centre. If this seems excessively protracted differentiation it should be noted that of 600,000 properties in England and Wales in 1911 only 28 percent

[3] The rate and magnitude of increase of Melbourne's functional establishments makes interesting comparison

Date	Retail	Wholesale	Services	Offices	Industry	Government	Residences
1857 No.	674	203	359	850	650	98	437
1857-1901 % change	23	109	152	230	83	12	77
1901-1962 % change	71	10	75	47	15	98	-88

Source: R.J. Johnston (4)

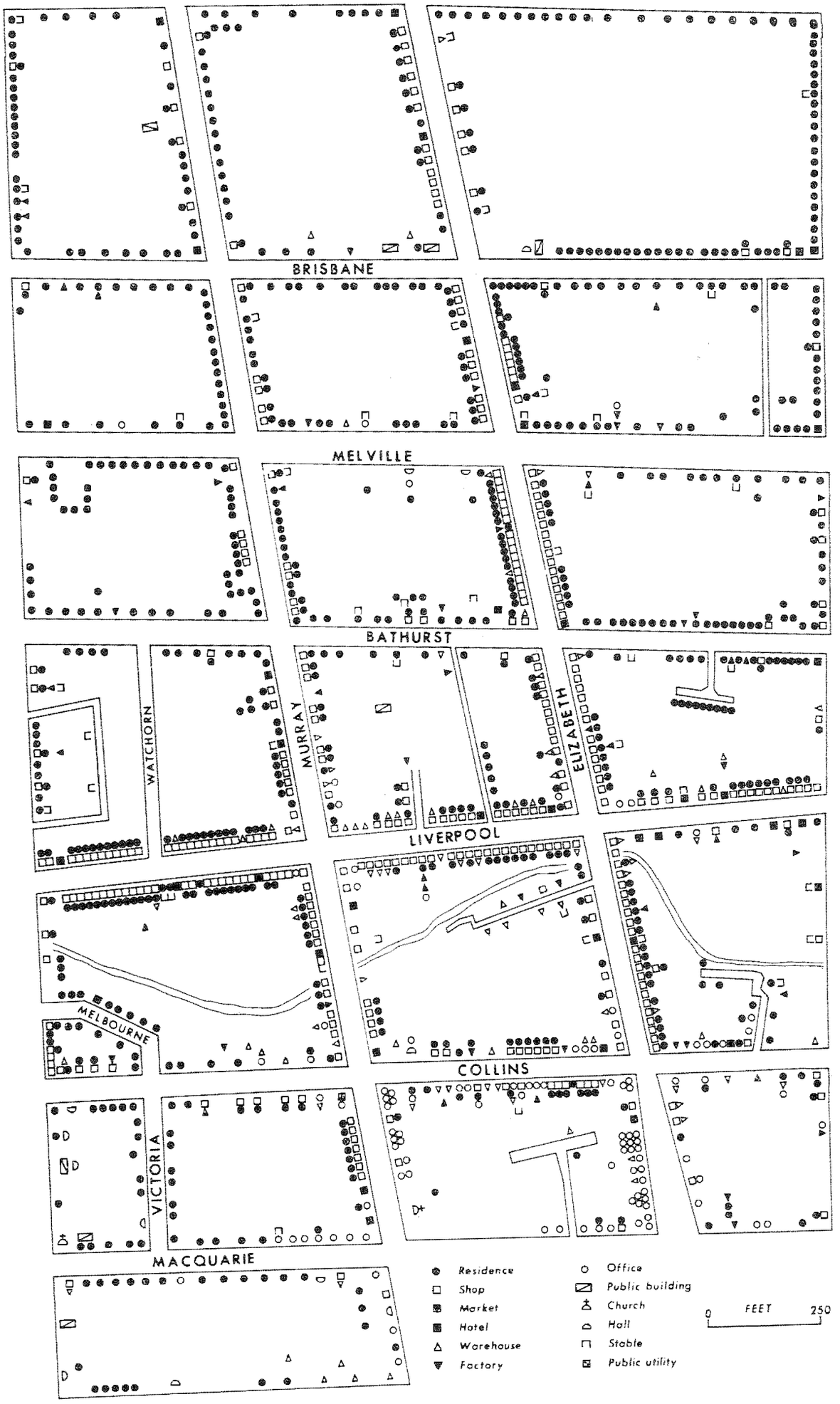

Fig. 15.1 Distribution of functional units 1901 in nineteen inner blocks (Assessment Roll, 1901).

Table 15.B

Functional Proportions of Block Total Valuations 1901

Block No. (Fig. 2.5)	No. Units	Total Valuation (£)	Shops & Banks	Hotels	Warehouses	Total Commerce	Offices	Factories	Public Buildings & Halls	Residential
65	53	964	5.7	10.9	-	16.6	-	3.3	8.3	71.8
66	34	767	2.1	5.9	-	8.0	1.7	5.2	-	85.1
67	63	947	6.0	-	-	6.0	-	5.7	-	86.6
68	109	3,810	40.5	8.8	2.8	52.0	-	1.4	-	45.5
69	138	5,014	40.4	14.1	3.5	58.0	2.6	2.2	-	34.9
70	89	4,031	12.3	16.6	1.2	30.1	21.8	0.4	6.7	41.0
71	45	3,219	7.7	-	10.1	17.9	16.7	-	23.5	41.9
81	62	1,524	20.6	8.7	2.6	31.9	-	2.0	6.6	59.6
82	62	1,248	20.1	6.4	1.2	27.7	-	12.8	-	59.2
83	87	2,774	33.1	4.3	-	37.4	1.3	2.3	10.6	47.3
84	99	6,101	47.9	5.1	9.4	62.4	2.0	1.4	0.6	33.4
85	132	10,588	44.0	9.1	13.1	66.2	8.4	3.6	1.3	20.3
86	108	5,795	24.8	3.5	16.7	44.9	36.6	1.1	-	13.3
96	83	2,254	5.9	5.9	1.2	13.0	-	-	1.2	85.3
97	88	2,377	8.1	9.4	-	17.5	-	10.0	-	72.4
98	80	2,296	31.0	6.5	-	37.5	-	8.8	-	53.6
99	93	3,898	45.0	9.0	2.3	56.3	2.3	7.5	-	33.7
100	91	5,203	33.0	22.8	7.5	63.3	6.7	4.8	-	25.2
101	34	2,400	13.5	-	11.5	25.0	31.6	19.9	-	23.5

Source: Assessment Roll for the City of Hobart, 1901 (12)

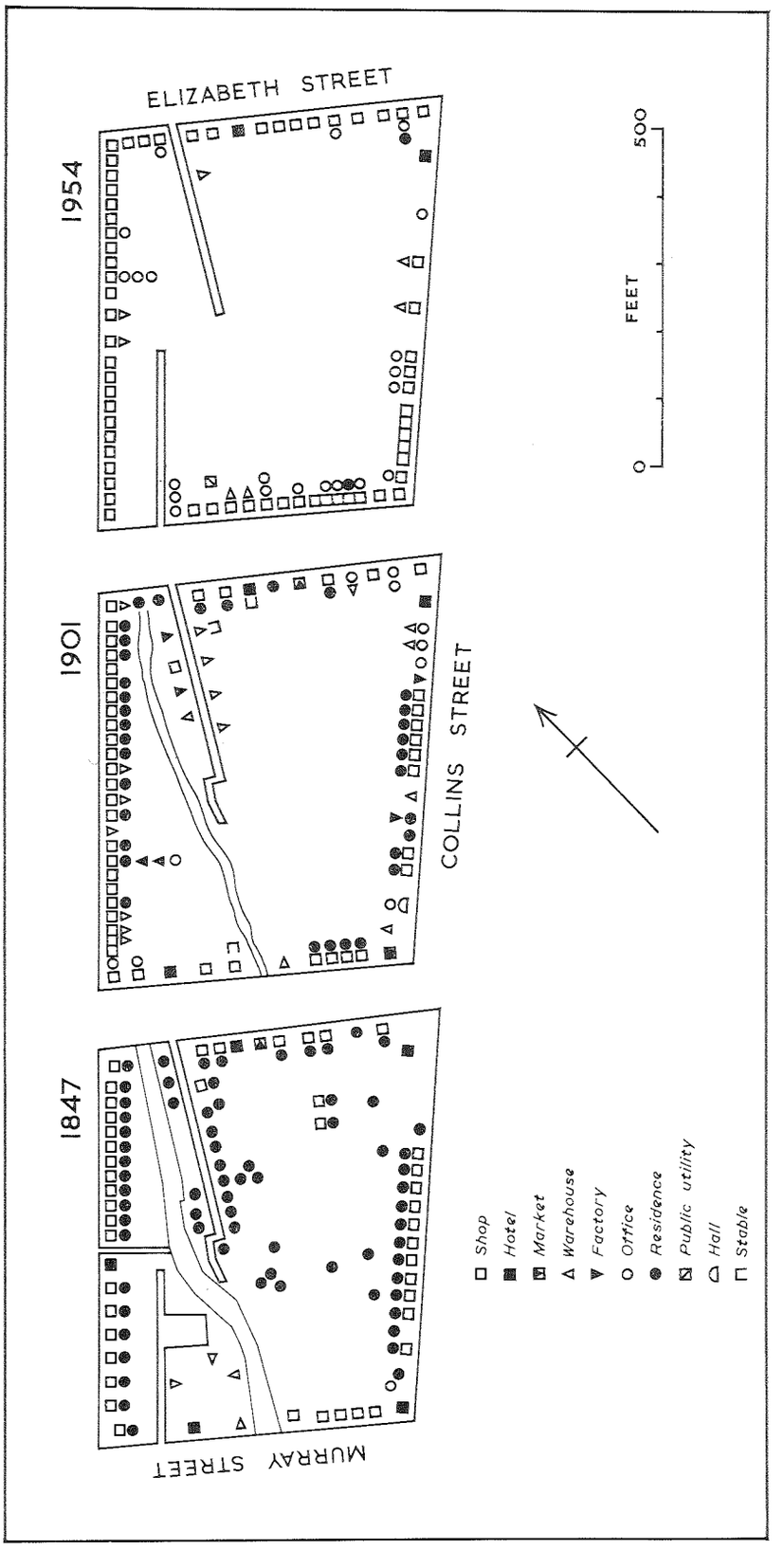

Fig. 15.2 Changes in functional composition of the main city block, 1847-1901-1954 (Assessment Rolls)

were shops not used as dwellings; the lock-up shop represented a new concept of retailing.[4]

In the 19 blocks of Figure 15.1 only 23 percent of the 376 shops (exclusive of hotels) were not associated with a residential section and the contrast between the main block and others nearby is clear: in Block 85 38 percent of the 47 shop units were non-residential, in Block 68 only four of 40 were so. The residential proportion of block valuation fell as low as 13.3 percent, but only Blocks 85, 86, 100 and 101 held less than 30 percent of residential property. Five blocks could count more than 40 percent of their property value in shopping and banking premises compared with two in 1847, indicating a definite trend toward differentiation and concentration of central functions despite an urban population increase of only 13,000 people in 54 years. The implication is, therefore, that any growth of population beyond a threshold as low as (and possibly lower than) 20,000 can be expected to produce a consolidation and crystallisation of central functional tendencies, and the development of a Central Business District as defined by Proudfoot (14), Murphy and Vance (15), or variations thereof. In six of the 19 blocks of Figure 15.1 shops and banks accounted for a greater share of block total valuations than residences. The 1847 and 1954 equivalents were four and twelve blocks, respectively. For total commercial uses six blocks could claim more than half their valuation so disposed, which was in fact two less than in 1954 and one less than in 1847. However, the level of commercial representation was higher than in 1847, surpassing 60 percent in three blocks and reaching 66 percent in the main block compared with 61 percent at the first valuation.[5]

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[4] J.B. Jefferys: Retail Trading in Britain 1850-1950, p.15. (13)

[5] This appears to be in keeping with Ratcliff's findings in Madison, Wisc. where there was only a small increase in non-residential ground-floor enterprises in a 30-year period, resulting in little physical expansion of the central area, but where considerable potential for increasing the volume of business existed, especially by enterprises using the ground space most intensively. Reported in Ratcliff (16), pp.320-321.

Definition of Central Functions

The apparent reduction in the number of blocks having more than 50 percent of property value in commercial uses raises the question of what constitutes a central function. It is essentially the same problem of definition which underlay delimitation of the CBD by Murphy and Vance. The finding that six blocks of inner Hobart in 1901 had more than 50 percent of total property value in commercial premises compared with seven in 1847 and eight in 1954 is a valid comparison of the concentration of particular uses at different times. But the selection of uses covered by the umbrella term 'commerce' provides for deception. The progressive proliferation and integration of offices within the core area as part and parcel of business functions should reasonably be recognised. A blanket inclusion of all offices is simplest, though a case could be made for differentiating the commercial offices of agencies, insurance companies, shipping lines etc. from the professional rooms of lawyers, medicos and dentists. If we add office properties to the shops, banks, hotels and warehouses comprising the commerce of selling, then three more blocks of the 1901 inner city (Blocks 70, 86, 101) had more than half their valuations in 'business' functions. In 1954 a further three (Blocks 71, 82, 97) would be added, whereas in 1847 the office function brought only one additional block (Block 70) to this business-dominant threshold.

Murphy and Vance, it appears, were quite uncritical of the range of office functions, including among their CBD land uses "the whole miscellany of offices so often found near the centre of a city."[6] At the same time they excluded wholesaling as being not representative of "real central business uses" since it is localised by transport rather than centrality. In attempting to discriminate between business and non-business land uses this may be allowable -- at least it has been so far as many writers on the CBD are concerned -- but in deciding which are central functions the

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6 R.E. Murphy and J.E. Vance: Delimiting the CBD, Economic Geography, 30, 1954, p.203. (15)

form and manner of definition are much less convincing. Murphy and Vance go on: "Even more obviously, factories and residential units though represented in the CBD, are not characteristic elements"[7] -- of the CBD, as defined by Murphy and Vance?

Without making too fine a point, it is clear that the authors' concern is primarily with business functions, but it is also clearly with central functions, for it is on that basis that wholesaling is excluded despite its very close association with retailing and even with selling direct to the customer as well as with bulk storage of goods. Thus to say that warehouses, factories or residences are not characteristic elements of the centre is untenable, whether or not they are characteristically business functions. As we have already seen by comparing the core of the Hobart urban area at two points of time, the composition of functions changes. The fact that most CBD studies have dealt with contemporary geographical distributions, seems inadequate excuse for deciding that functional units using land at the centre are not characteristic. They may not be representative of majority uses, or business uses, but at that point of time, and -- until forced (segregated) out by rising land values, declining patronage, or administrative fiat -- in the current phase of evolution, functions at the centre of urban property concentration are, quite simply and irrefutably, central functions.

It must be admitted that this does not solve, nor is it designed to solve, any outstanding question of CBD delimitation. Clearly some arbitrary basis of definition must be used in carrying out what is at least a useful exercise in comparative spatial relationships, with planning applications. But the changing nature of core functional composition raises doubts as to whether land use is the optimum standard of central or zonal delineation, despite its wide acceptance. One is inclined to think that for purposes of business-area definition a measure such as Proudfoot's block-frontage

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7 Ibid.

volume of sales would have better currency through time. Offices which act as receiving points for sales transacted by company representatives beyond the centre may be regarded as a complication, but the same is true of an important sector of department store and some other retail business. For delimiting the central area of a city, regardless of functional composition, property values (assessed -- for rating, or appraised -- for market value) seem the safest measure. The only arbitrary assumption required then is a level of value concentration, whether block-total proportion of urban property (Figures 2.3 and 12.1), block-average property value (Figures 2.4 and 12.2), or block-average front-foot property value. Both land values and property values were rejected by Murphy and Vance, after due consideration, as bases for CBD delimitation. Neither measure is without its weaknesses and neither will reveal actual amounts of land or floor-space given to particular uses, which is itself an important spatial element. But as a basis for delimitation of the urban core, property values avoid the serious deficiency of rejecting land uses at the centre on the grounds that they are not "characteristic."

Bohnert and Mattingly (17) found it necessary in dealing with data changes over time to use modified Murphy-Vance methods; Rannells, while using a section of Philadelphia in many ways comparable in its extent with inner Hobart's relation to the whole city, and relying heavily upon numbers and areas of establishments, delimited his CBD by the Delaware and Schuylkill Rivers and the points at which sample numbers of establishments per block fell off sharply;[8] and Ward, in an excellent outline of Boston's emerging CBD, at no stage attempted to define its area by any quantitative measure, although "the enlargement of the limits of the central business district" and related observations were made.[9] If a definition of the central or

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[8] J. Rannells: The Core of the City, pp.86-7 (18)

[9] D. Ward: The industrial revolution and the emergence of Boston's central business district, Economic Geography, 42, 1966, p.166 (19). Lest the writer be subject to his own

core zone is sought it seems to the writer that the most reliable objective procedure generally available is an independent measure such as a chosen level of property concentration, say two percent of urban property value in any given block. This, however, requires the prior knowledge (probably not available without extensive data plotting) of a much more extensive area than that which it is proposed to define, and in this respect the Murphy-Vance CBD technique has the considerable advantage of needing only to be applied slightly beyond the zone ultimately delimited.

Developing Commercialism

The growth of manufacturing industry has unquestionably made the greatest impact upon political economy and the land surface during the century with which this section is concerned. In the inner areas of towns and cities, from which heavy, noisy and noisome industries have been largely excluded, the mantle has fallen to commerce. While shops were prominent among the first small functional units to leaven the residential (in the case of governmentally established outposts, residential-military) monopoly, it was not until the latter 1800s that "the second retailing revolution" came about.[10] Shopkeeping began to move out of the area of family concern into the ambit of big business. Although the large majority of shops remain the concern of a few operatives, a relatively small number of department and chain stores, and in Britain cooperatives, are responsible for far more than their numerical share of total trade.[11] The appearance of manufactured lines in small jars and tins and packets simplified the task of the shop-keeper by reducing or removing his para-manufacturing function.

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9 (contd.) criticism it should be pointed out that it is not part of the aim of this study to establish boundaries for any particular combination of central functions, though the data available for functional proportions of block property value totals could easily be used for that purpose.

10 Dorothy Davis: A History of Shopping, pp.276-7 (20)

11 J.B. Jefferys, op. cit., gives an excellent analysis of the rise of the big retail firms in Britain

It also cleared bulky containers from the shop floor, increased the variety of goods available for purchase, and above all it greatly widened the consumer market.

In Hobart these influences seem to have come to bear in any real measure after the turn of the century and probably after World War I, but this is an area of sociological importance that requires much more intensive analysis than it has been possible to make here. Nevertheless an inspection of Table 15.C shows that shops increased their proportion of main-block value not at all before 1901; and the number of establishments was almost stationary at about 45. It was in fact the addition of wholesale units which lifted the leading block's commercial rating between 1847 and 1901, but then in the next half century the rise of shops to 65 (and their value to 70 percent of all property) eliminated manufacturing of any kind, all

Table 15.C

Functional Division of Main Block Property Values
1847-1901-1954
(as percentage of block total property)

Period	Shops	Warehouses	Hotels	All Commerce	Offices	Factories	Residences
1847	41.5	1.2	13.9	56.6	3.8	-	39.5
1901	40.2	13.1	9.1	66.2	8.4	3.6	20.3
1954	70.6	-	8.2	81.0	18.5	-	0.3

Source: Assessment List 1847, Roll 1901, Roll 1954/55.

residences excepting two caretakers' quarters, and warehousing except that integrated with department stores. The unsophisticated appearance and modest size circa 1900 of what was to become Tasmania's largest department store at mid-century is illustrated in Appendix XXVI and the rather raw state of lower Collins Street is also seen. Hunter Street's proximity to the port militated against the possibility of a more presentable facade there, but within the main block Cat and Fiddle Alley was a veritable eye-sore (Appendix XXVII). Liverpool Street was more representative of the city core and two views of it in 1864 and 1920 (Appendix XXVIII)

give some impression of changing appearances in this century, as does the portrayal of one corner of the Liverpool-Elizabeth intersection (Figures 15.3, 15.4) at similar times. The development of commercial premises did not stand still entirely before the new century, as the remodelling of another important corner site between 1860 and 1880 exemplifies (Figures 15.5, 15.6).

Over the whole period 1847-1954 the increase in the commercial proportion of inner area block values has been widespread. The most notable increases (Figure 15.7) were those in the three central blocks (Blocks 84, 85, 99) which already had more than half their property values in commercial functions at the earlier date. On the nearby eastern margin of the main commercial zone Blocks 113-115 also experienced commercial additions in the 20-50 percent category. A dozen contiguous blocks between Murray and Argyle Streets increased in commercial content as business penetration followed the main access line of Elizabeth Street, and to a lesser extent the two adjoining routes. Only Block 81 broke this pattern through a strong early representation of shops and hotels being weakened by the later addition of factories and offices. For similar reasons the more centrally placed Blocks 86, 101, 106 and 107 have declined in commercial functions, though office additions comprise some of the replacement, along with public buildings of a service character. The majority of inner residential blocks have sustained some commercial penetration and substitution since they were substantially or wholly given to residential use in 1847 (Appendix XXIX). A sizable area of the near west, including Blocks 43-45 lost some of its strong hotel and factory content, and the initially warehouse-dominated port periphery lost commercial ground to other functions -- manufacturing in Block 116 on Old Wharf, residential increase in Blocks 53 and 58 behind Salamanca Place, for example.

Examination of Figures 15.8 and 15.9 makes it fairly clear that the main period of commercial advance since the mid-nineteenth century was in this century rather than last. Commercial decline was more widespread than increase before 1901 and many blocks with

Fig. 15.3 Shop at the corner of Elizabeth and Liverpool Streets, 1874 (Tasmanian Museum collection).

Fig. 15.4 Reconstructed shop at the corner of Elizabeth and Liverpool Streets, 1917 (Tasmanian Museum collection).

Fig. 15.5 Pharmacy at the corner of Liverpool and Murray Streets, 1860 (Tasmanian Museum collection).

Fig. 15.6 Remodelled pharmacy at the corner of Liverpool and Murray Streets, 1880 (Tasmanian Museum collection).

no commercial property in 1847 remained in the same state in 1901. The depressed economy before 1870 and during the 1890s was clearly discouraging to commercial endeavour in most of the inner city blocks, but four leading blocks between Collins and Bathurst Streets managed to push their commercial content further above the 50 percent level already attained. The general position is substantiated by Table 15.D, showing a decline in the commercial share of all property.

Table 15.D

Functional Composition of Inner Hobart Property Value
1847-1901-1954
(as percentage of total inner area value)

Period	Shops	Ware-houses	Hotels	Banks	Offices	Fact-ories	Public Bldgs.	Resid-ences
1847	16.1	5.9	12.5	1.0	1.5	2.8	4.7	55.0
1901	13.8	4.6	6.1	0.8	4.1	5.0	0.7*	62.3
1954	19.6	5.8	8.2	1.5	12.9	7.1	5.3*	34.7

* Some governmental property excluded from assessment in 1901 and all assessed at reduced rate in 1954.

Source: Assessment List 1847, Roll 1901, Roll 1954/55.

Since evidence above has shown increasing commercialism at the centre, it can be assumed that the retraction in the remainder of the inner area results from the difficult economic circumstances of the later nineteenth century, without which a steady move in the direction of the 1954 position would have occurred.[12] The considerable concentration of property values in the central city area has been demonstrated (Figures 2.3 and 12.1) but the high relative concentration in commercial uses (shops to offices, inclusive, in Table 15.D) is seen by the fact that 37 percent of all town property value in 1847 and 48 percent of inner area property value in 1954 was so placed. Bartholemew (22) found that the highest proportion of developed area in commercial uses among 41 American cities of less than

[12] It is of course possible that extension of the urban area and relative dispersal of the not greatly expanded population attracted a wider dispersal of non-central commercial enterprises. But since the corner shop is tied to the local consumer and the 1901-1954 period reversed the earlier downturn it would be unrealistic to suggest that the phenomenon was a fine illustration of a quite wide-ranging decentralising process. See again Ratcliff (16).

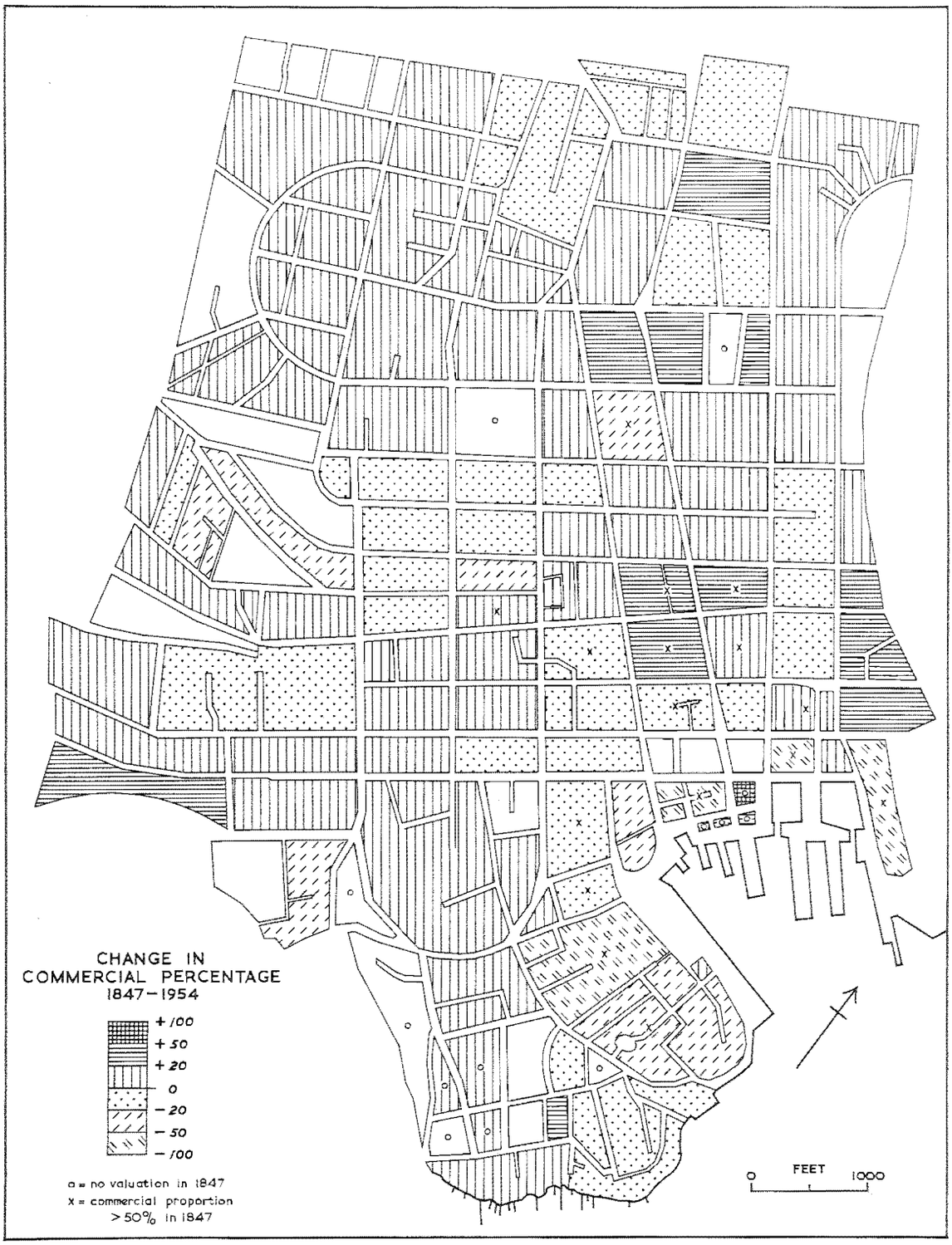

Fig. 15.7 Change in proportion of commercial property values of inner urban blocks 1847-1954 (Assessment Lists and Rolls).

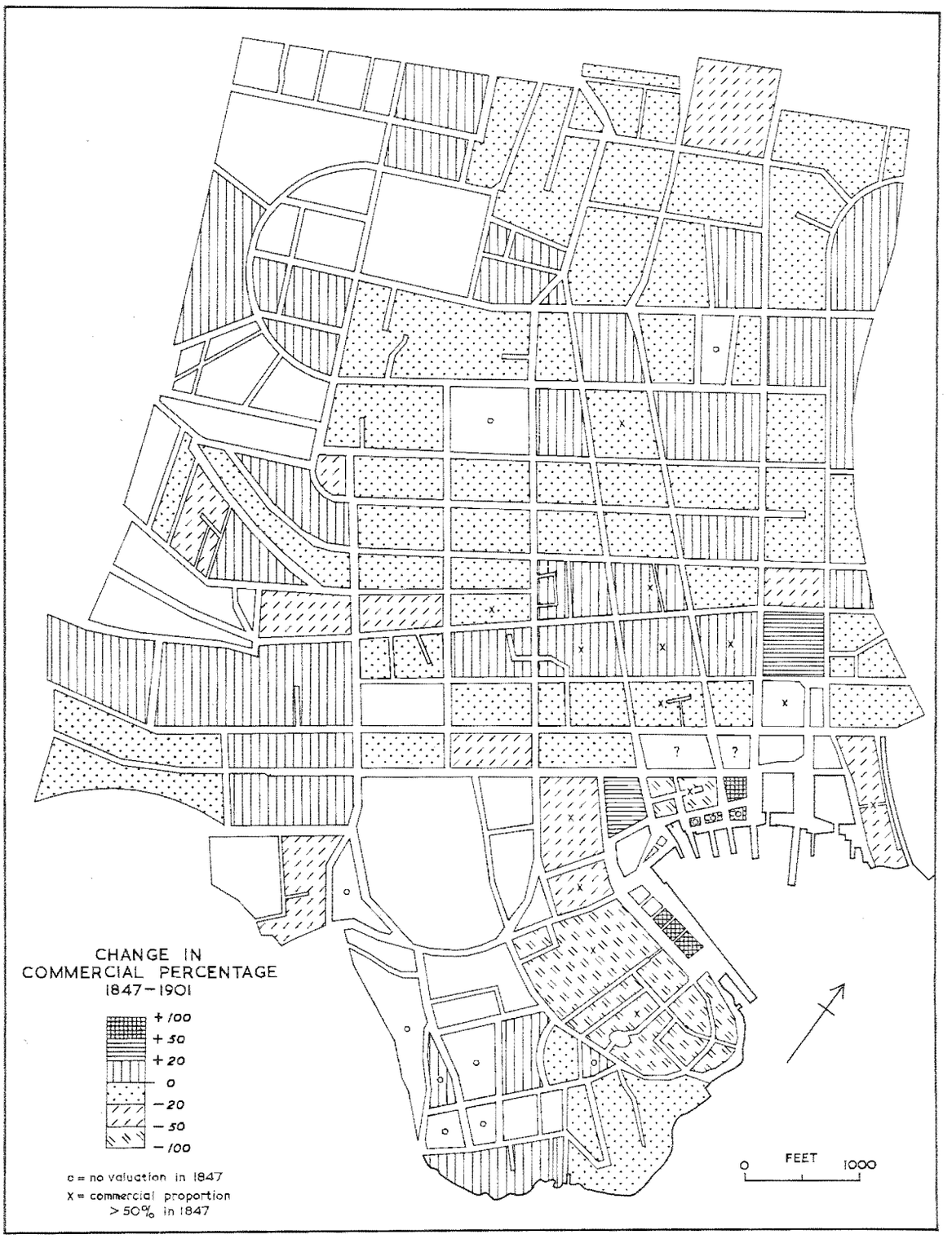

Fig. 15.8 Change in proportion of commercial property values of inner urban blocks 1847-1901

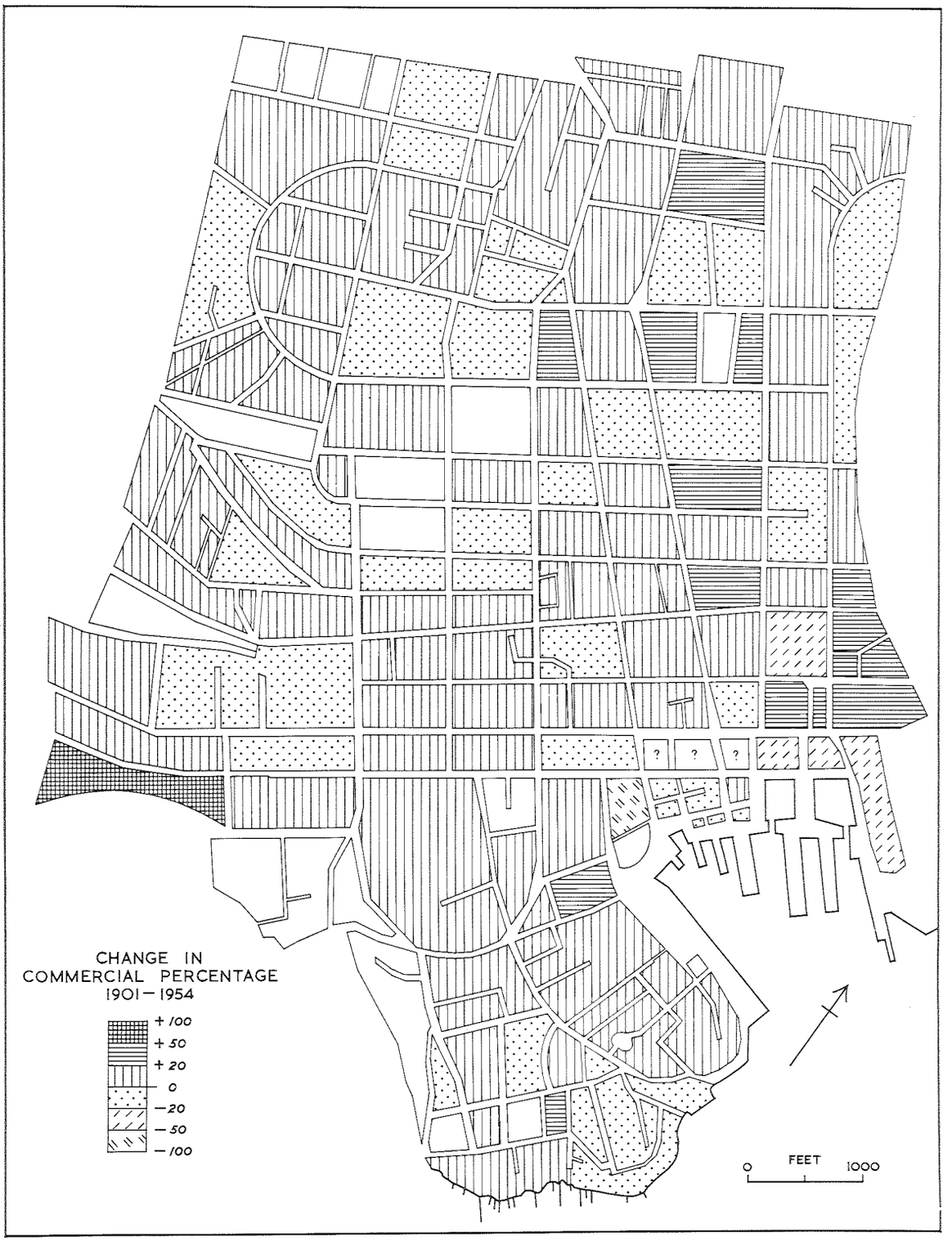

Fig. 15.9 Change in proportion of commercial property values of inner urban blocks 1901-1954.

100,000 population was 6.49 percent[13] and the average for the 50,000-100,000 group (13 cities) was 2.58 percent.[14]

After 1901 the increase in commercial property (narrowly defined) was quite general. A few blocks such as 18, 41, 96 and 107 had made gains in the 1847-1901 period which were now offset by other functional increases, but for the most part previous gains were extended and losses reversed. This did not require great numerical increases of functional units, as Table 15.A indicated, for the unit value of shops and other commercial establishments tended to increase more rapidly than the residential function, which was that most often replaced (see Chapter 17).

The Residential Function: Central Decline, Peripheral Extension

Commercial substitution for residential property means that a map of residential change should roughly complement one of commercial change. Comparison of Figures 15.7 and 15.10 indicates a notable amount of complementarity, though in some blocks both functions may decline in favour of other infusions, or they may increase together if space allows (Appendices XXIX and XXX). We know that residential units within the colonial town boundary increased in number by nearly 4,700 in the 1847-1954 period, almost 1,600 being added after 1901. This meant that the number of residences in many blocks grew, even though the residential share of all property in the block declined. The western area illustrates this markedly: while the 50 houses of Blocks 1-10 in 1847 became 519 in 1954, all but two of the ten blocks experienced reductions in what were mainly residential monopolies of block property.

Overall, however, only 22 of the 110 wholly or partially improved blocks of 1847 showed absolute decreases in the numbers of residential premises contained. Strikingly, all were contiguous and all except Blocks 110 and 116 at the northern side of the

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13 H. Bartholemew: Land Uses in American Cities, Table 1, Appendix, p.158 ff.

14 Ibid., p.47.

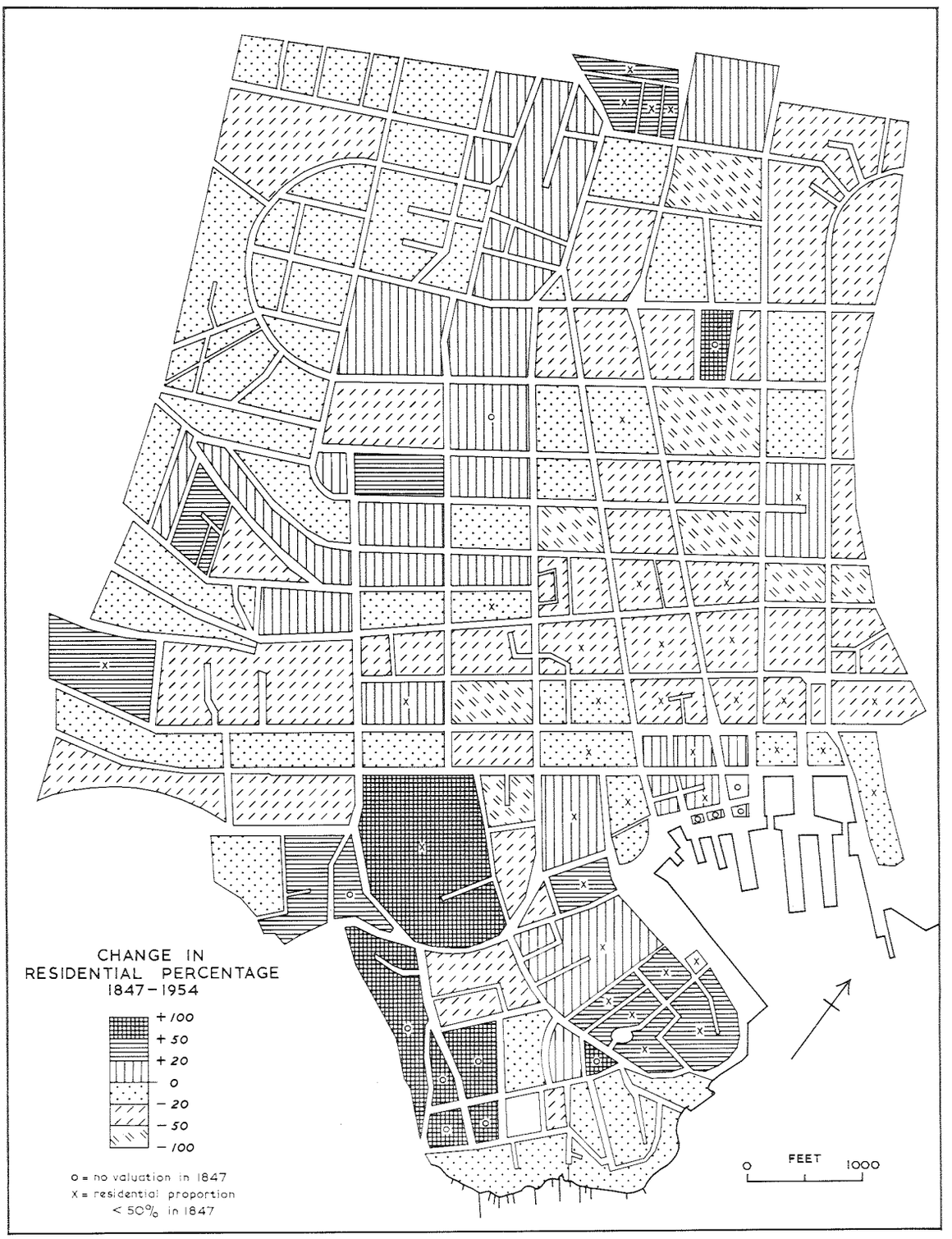

Fig. 15.10 Change in proportion of residential property values of inner urban blocks 1847-1954.

port lay north of Macquarie Street, east of Barrack Street and south of Brisbane Street: within three blocks in any direction of the main Elizabeth-Liverpool intersection and point of highest land value. The extent of their residential decline was from 921 to 389 units -- a loss of 58 percent, or 24 residences per block. The increase in the remainder of the inner urban area therefore amounted to 5,223 residential units in 99 occupied blocks, a few of which lacked any dwelling places at all. The range was considerable (see Appendix II) reaching a maximum of 167 units in the large Block 102.

In terms of property value composition the central area of numerical loss also showed a general decline of the residential share by more than 20 percent. The pattern of decline extended widely beyond the leading property concentrations in almost every direction to the periphery. Only two tracts of residential value-increase interrupted this pattern. In the west and north a line of a dozen blocks from Block 15 to Block 40 made substantial residential gains, mainly by infilling but sometimes at the expense of the small and numerous inns or grog shops of the mid-nineteenth century. One hundred of these disappeared between 1847 and 1954 and Block 45 adjoining the leading central blocks illustrates the effect. In 1847 four hotels and two shops held the residential share of property value to 68.8 percent; in 1954 two factories had replaced the four hotels, and residences accounted for 81.2 percent of block value. However, the tract made most of its residential gains by the extension of occupance in the nineteenth century (compare Figures 15.10, 15.11 and 15.12). During more recent years the gradual addition of other functions, mainly shops, in reverse of the hotel-removal process, has reduced the residential strength achieved earlier. Thus Block 40's 90 percent of block value in residences in 1901 was reduced, very slightly, to 97 percent in 1954 by the acquisition of two small shops and one small factory. In some blocks, especially those transitional between dominantly business and dominantly residential zones, the

changes in functional composition are less simple. Block 45, for example, did not, as can be imagined, experience the change from 1847 to 1954 composition in one fell swoop. Between the four hotels and two shops on the one hand, and the two factories and two shops on the other, were the four shops, one hotel and one public building of 1901. Clearly, were it possible to examine the situation at more frequent intervals, other changes might be found, even with a slowly developing urban centre. At the same time, it is apparent that economic restraints imposed by returns on building capital would place a limit on the frequency of functional change over a long period, but that depends to some degree on the adaptability of the functions concerned to premises not specifically tailored to the occupier's needs. Table 15.E clarifies the course of change in Block 45 and introduces other examples.

Table 15.E

Functional Change in Transitional Blocks*

Block No. & Date	Residences		Shops		Hotels		Warehouses		Factories	
	No.	% value	No.	% value	No.	% value	No.	% value	No.	%value
45										
1847	37	68.8	2	4.1	4	27.1	-	-	-	-
1901	44	83.2	4	6.5	1	5.5	-	-	-	-
1954	39	81.2	2	2.6	-	-	-	-	2	11.8
53										
1847	9	13.0	1	2.5	2	13.7	13	65.5	1	1.1
1901	82	67.6	6	5.2	2	4.3	3	4.4	5	17.8
1954	86	32.0	7	3.0	1	6.3	9	17.7	10	10.9
96										
1847	42	96.1	-	-	1	3.9	-	-	-	-
1901	70	85.3	7	5.9	2	5.9	1	1.2	1	1.0
1954	55	43.0	11	7.4	-	-	3	3.2	1	35.6

* Other functions than those shown were present, thus the percentage values fall short of 100 in some cases.

Source: Assessment Lists 1847, Roll 1901, Roll 1954/55

The second tract of residential increase in the share of property values was Battery Point, or at least its northern and southern margins. On the south and southwest several blocks completed or developed after 1847 had inevitably to increase their residential content, so a rise by more than 50 percent was not spectacular. Similar additions to the Barracks area (Block 39)

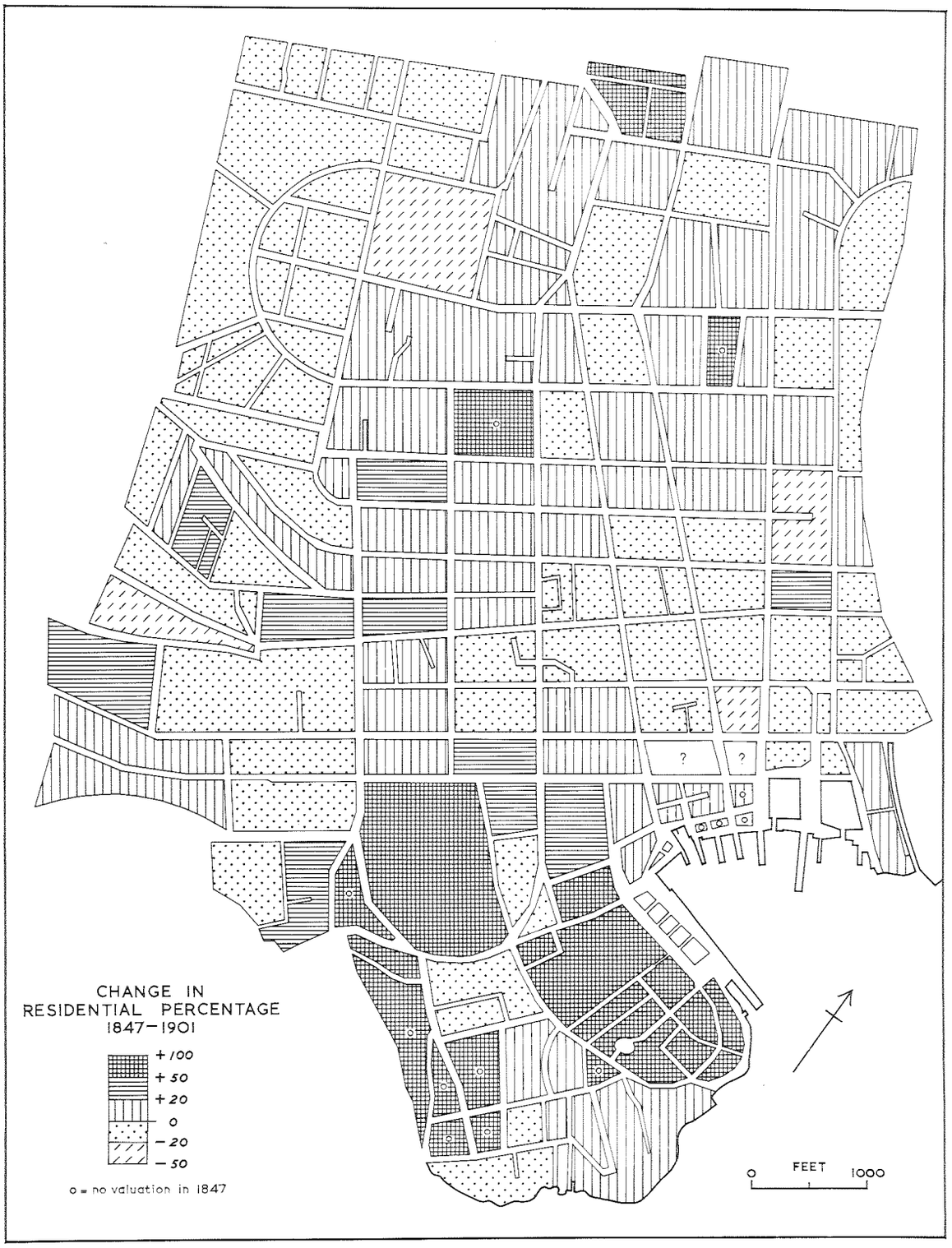

Fig. 15.11 Change in proportion of residential property values of inner urban blocks 1847-1901.

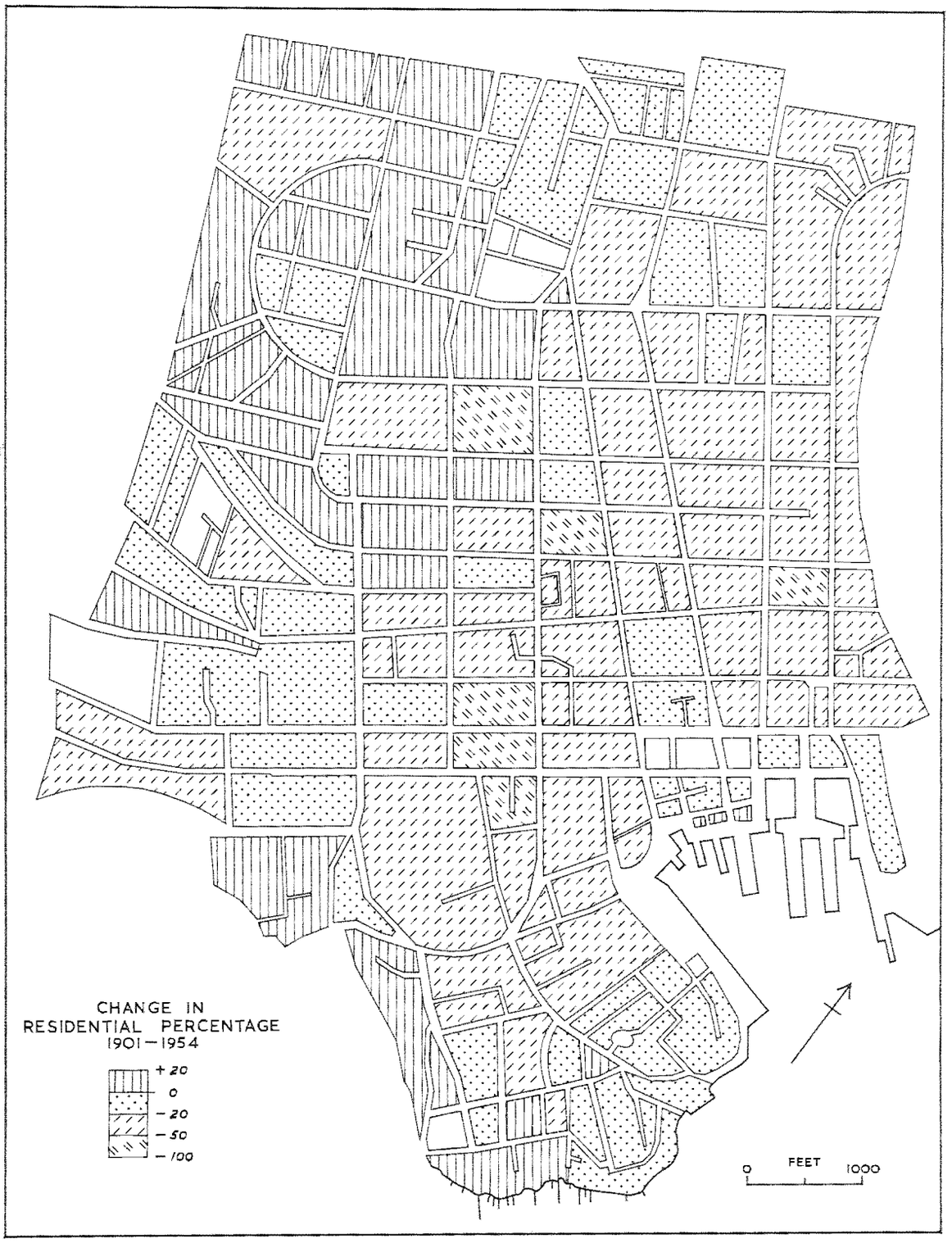

Fig. 15.12 Change in proportion of residential property values of inner urban blocks 1901-1954.

had the same result. On the slope facing the port the situation developed in the manner of the Block 53 analysis in Table 15.E. Substantial residential construction before 1901 saw almost a direct transposition of residential and warehouse value shares; then followed a revival of warehousing and the development of office functions (26.5 percent of Block 53 value) with consequent severe reduction in the residential value share (Figure 15.12).

Functions Other Than Commercial and Residential

Houses and shops together accounted for 90 percent of the functional units of Hobart in 1847 and 78 percent of inner Hobart in 1954, with an intermediate measure of 85 percent in 1901. This did not leave much latitude for other inner functions, nor did the functional structure based on property valuations remove the dominance of the two most numerous and widely distributed components of urban operation. Nevertheless by 1954 houses and shops held only 54 percent of inner property value, so that some of the less numerous functions which had progressively diversified the urban scene had obviously achieved positions of some consequence. These do not need to be exhaustively appraised, but offices, factories, and public buildings, together accounting in 1954 for 13.3 percent of unit functions and 25.3 percent of property value, deserve attention.

Offices increased their number by almost 2000 percent between the middle of the nineteenth and the middle of the twentieth centuries. They developed a greater concentration at the centre than any other major function, and at no time appeared to deviate from this pattern. The pattern is logical enough. Many offices require less frequent patronage than shops and can occupy off-peak land; the smaller units (the large majority) take up less space than shops and do not need street level frontages; and offices can most easily adapt to pre-existing residential buildings, or vice versa (Figures 15.13 and 15.14). Thus we find in Table 15.F that the six highest block concentration of offices contained 90 percent of all urban offices in 1847, falling through 79 percent

Fig. 15.13 Southwest along Macquarie Street, 1866. Military barracks at upper left (Tasmanian Museum collection).

Fig. 15.14 Southwest along Macquarie Street, 1908. Viaduct further back, now takes in Murray Street, but little change to building outlines beyond (Tasmanian Museum collection).

Table 15.F

Concentration of Offices 1847-1954

Block Rank	1847				1901				1954			
	Offices		Shops		Offices		Shops		Offices		Shops	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	17	53	45	8	60	35	51	8	123	19	65	8
2	5	16	38	7	25	14	47	7.5	89	14	57	8
3	3	9	36	7	22	13	40	6	53	8	40	5
4	2	6	32	6	17	10	40	6	49	8	37	5
5	1	3	31	6	7	4	31	5	46	7	35	5
6	1	3	29	5	6	3	26	4	37	6	33	4
6 Blocks	29	90	211	39	137	79	235	37	397	62	267	35

Source: Assessment Lists 1847, Roll 1901, Roll 1954/55

in 1901 to 62 percent in 1954.[15] Shop concentration fell remarkably gradually from 39 to 35 percent, but at much lower than office levels. The relative decentralisation of offices within the inner suburban area almost certainly reflects the movement of some personal services, notably medical practitioners, to developing residential locations, as also the rise of clearly recognisable office units associated with workshops, timber yards and warehouses scattered fairly widely throughout the inner area, and of new office functions such as the tourist bureau of Appendix XXXI. The six highest office concentrations involved a total of eight different blocks over the three dates examined, with Block 70 falling from 1st to 5th rank and Block 86 rising from equal 5th in 1847 to 1st in both 1901 and 1954, when Block 85 ranked 2nd. Leading shop concentrations involved only seven different blocks and five were common to each of the three periods.

In contrast to the centrality of offices, factories have been much less concentrated despite the economic advantages of agglomeration in theory and practice. However, this statement must be qualified. Firstly, the great majority of the inner urban factories have been of small size and tied to local consumers rather than material inputs or inflexible transfer nodes or lines. That is not to say that the benefits of locational proximity are eschewed, but

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15 In the light of Vance's impression (8) that the CBD may be developing into more of a central office than a business district this relative decline holds some interest

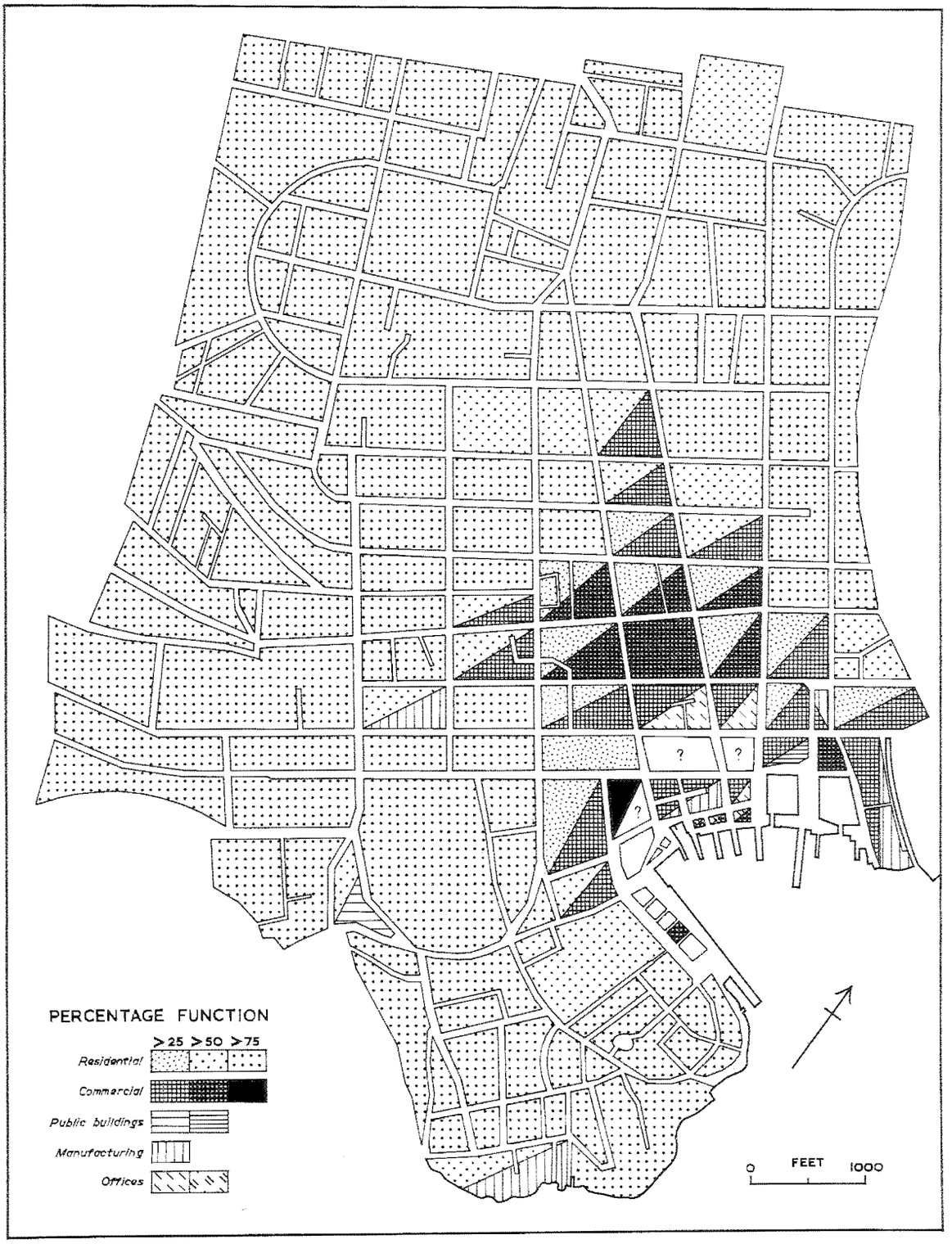

Fig. 15.15 Distribution of functions with more than 25 percent of block valuations, 1901 (Assessment Roll, 1901).

where inter-firm linkages involving semi-processed material inputs have been important the way has been open in recent times to move north to the Derwent Park industrial site. Secondly, external controls have probably influenced such concentration as there is equally with internal locational preference. Only the smallest workshops have been admissible to some residential areas and no machinery at all to others, while more objectionable industries were early moved toward the urban periphery.[16] Thus the most numerous collections of manufacturing units have been on the fringe of, or even in, the commercial core: 12, 11, 10 and 8 in Blocks 98, 67, 53, and 47 in 1954; six in each of Blocks 85, 88 and 99, and five in Blocks 47, 53, 80, 93, 97 and 100 in 1901. In very few cases did these 1901 industrial collections reach even 25 percent of block property value (Figure 15.15, cf. 11.3). Printeries, bakeries, shoe-makers and dress-makers are representative of the inner area manufacturing over a long period, as also the cycle works in Figure 15.16. Timber processing and furniture makers have been and still are within two or three streets of the main commercial block, despite the large space demands of the former. This presumably points up the small size of the city core, which if extended would certainly engulf such low density land use. In some cases existing buildings lend themselves to a succession of manufacturing usage, as instanced by the former water mill in Block 17 on the western periphery (Figure 15.17).

Public Buildings have been seen to hold an important place in the townscape and organisation of the young settlement. As the buildings have proliferated, their individual impact has assuredly declined, and the relative weakening of highly focussed governmental authority in daily life has aided that process. Nevertheless, as examination of the modern city image has indicated, some public

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[16] "Mezger's bone mill at New Town, long a source of annoyance from the disgusting, if not unhealthy, stench it emitted, has been closed. Another bone-mill and animal manure factory has, however, been started in the adjoining district of Glenorchy, which is very offensive to the neighbouring residents of New Town" -- Journals and Printed Papers of Parliament, 1886 (22)

Fig. 15.16 Cycle factory, Collins and Harrington Streets, 1936. (Tasmanian Museum collection)

Fig. 15.17 Gore Street mill beside the Hobart Rivulet, South Hobart. Once a brewery, later a woollen mill, partly demolished mid-1960s (Tasmanian Museum collection).

buildings of long standing and a few of recent advent are important social foci for part or all of the community. It is noteworthy that locational stability has been a feature of most public functions; some have been duplicated, but few have moved from their initial sites. Thus in Figure 15.18 showing the main public structures of the inner area in 1829, 1859, 1895 and 1954 we find (frame B) the original Presbyterian Church of 1822 replaced in the same block by the present church (Block 105); the old Government House moved to the Domain site; the Ordnance store transferred from Old Wharf to the New; the colonial Treasury near Old Wharf rebuilt in lower Murray Street; (frame C) the old market in front of the Custom House cleared away in favour of the New Market, later the City Hall; (frame D) the G.P.O. rebuilt on the corner of Elizabeth and Macquarie in 1904, and the Custom House joined to the old Commissariat Stores near the docks. Strictly speaking, the gaol function was moved from Murray Street (Block 71) to Campbell Street (Block 105), but the latter site had already been the convict barracks before the demolition of the old gaol at mid-century.

Some sites have experienced upgrading of function with or without building change, notably St. David's and St. Mary's Cathedrals, previously Church (Block 86) and Chapel (Block 42) respectively. More secularly, the city's Museum received two additional wings at different times between 1886 and the turn of the century (Appendix XXXII), making with the Town Hall of the 1860s and the new G.P.O. a collection of stone public buildings (Figure 15.19) to rival those a block away (Courts, Treasury, Cathedral) near the junction of Macquarie and Murray Streets. Not only the public buildings gave physical evidence of the community's solidity, for as the city progressed the more substantial colonial facades such as the Stone Buildings (Figure 15.14) were joined by the insurance companies in particular (Figure 15.20). Few of the public edifices after the first flush of architectural distinction and the interminable plans to replace Government House (Appendix XXXIII) were erected without notable public interest. Stoney, for instance, reported the New

A 1829

1. Penitentiary (Convict Barracks)
2. Hospital
3. St. David's Church
4. Guard House
5. Gaol
6. Court of Requests
7. Government House
8. Commissariat Stores
9. Bank of V.D.L.
10. Treasury and Custom House
11. Military Barracks
12. Ordnance Stores

B 1859

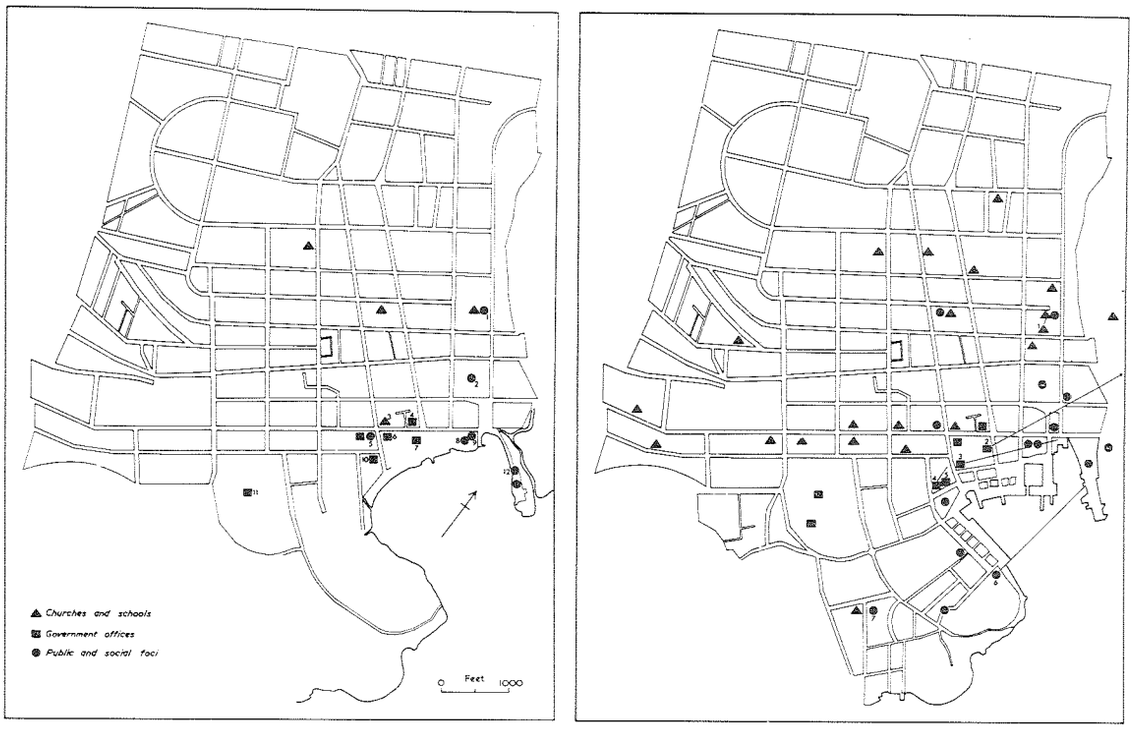
1. Presbyterian Church
2. Government Offices (Govt. House to Domain)
3. Treasury
4. Customs House
5. Parliament House
6. Ordnance Stores
7. Battery Point Mill

C 1895

1. St. Mary's Cathedral
2. Criminal Court
3. University
4. Railway Station
5. St. Joseph's Church
6. St. David's Cathedral
7. New Market
8. General Post Office

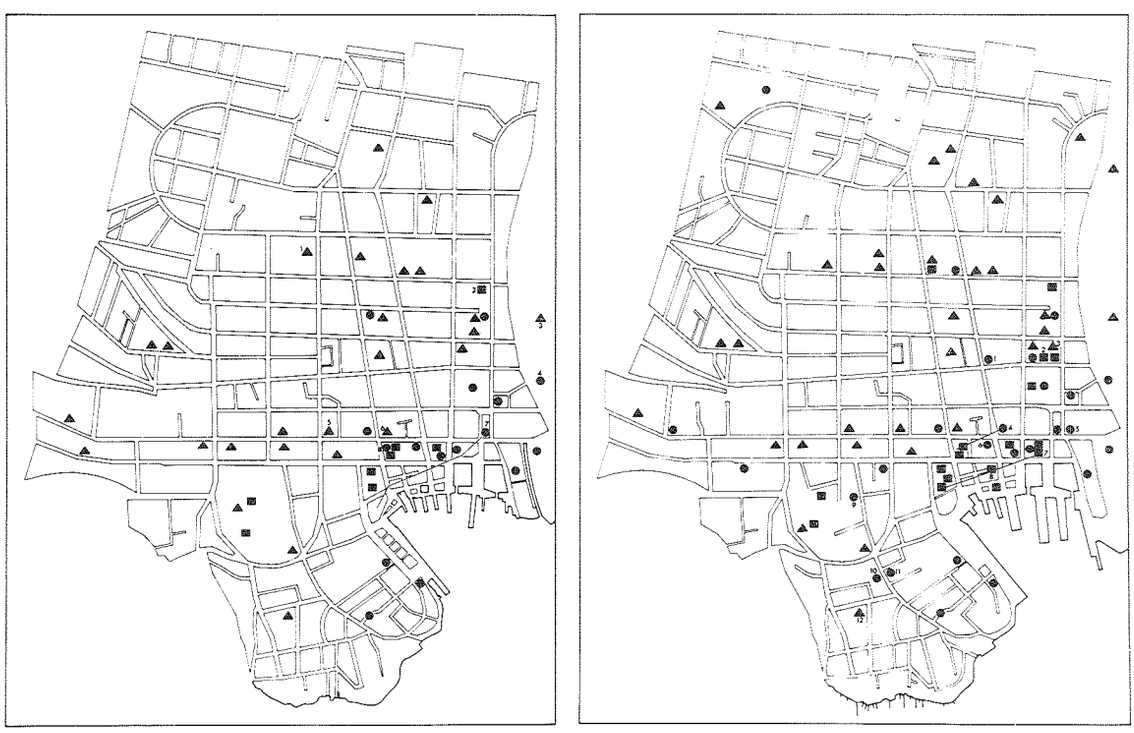
D 1954

1. Commonwealth Bank
2. Court of Requests
3. Technical College
4. General Post Office
5. Tramway Depot
6. Transport Terminus (Franklin Square)
7. Customs House
8. Hydro-Electric Commission
9. Repatriation Hospital
10. Queen Alexandra Hospital
11. V.D.L. Folk Museum
12. St. George's Church



A 1829 B 1859

Fig. 15.18 Development and location of main public buildings in the inner area of Hobart (Source: Various).



C 1895 D 1954

Fig. 15.19 Public buildings in Macquarie Street, northeast from Franklin Square, 1903. On the left, the G.P.O , on the right the Town Hall and Museum. Note the numerous chimneys in the city at this time. (Tasmanian Museum collection)

Fig. 15.20 Insurance offices at the corner of Elizabeth and Collins Streets. World War I peace celebrations in progress. (Tasmanian Museum collection)

Market opened "with much éclat": well finished, two large side entrances with elaborate iron gates, a commodious interior lined with stalls, and a central court (intended for a Fish Market) containing "a jet d'eau which has a pleasing effect as you approach."[17] How better to set a new city on its way!

Function and Fabric: An Unknown Relationship

An attempt has been made (Chapter 10) to assess the impact of time, growth and change upon the inner Hobart townscape. It would require exceedingly intensive study of a continuing record of the whole sequence of functional changes on particular sites to be in any kind of position to answer the question "how much change?", much less "how much change was necessary?" But the question may be possible to answer, and it almost certainly has application to urban planning. It is clear that a wide range of physical response to change of function (in kind or degree) is possible. Two similar enterprises occupy adjacent sites: one knocks down a sound but dated building, the other preserves what it regards as a fine period façade and modifies some of the internal structure. Which cost to the community (direct or through taxation relief) is the more justified? It may be argued that the factors involved are infinite and that any change in fabric benefits the construction industry. An apparently infinite number of factors also relate to locational decisions of the firm, yet they are made with some compromise between economic forces and personal preference. Analogously it seems that in many modifications to fabric through functional change the response is neither inevitable nor optimal. No doubt the ultimate test is profitability, usually measured in economic terms, sometimes in the form of social benefit. In the pragmatic and dynamic U.S.A. change in fabric in the form of urban renewal is widespread and striking. In the special circumstances of Hong Kong high-rise buildings are said to recoup their cost of construction in as little as five years. In Britain change is less rapid, more deliberate and perhaps excessively cautious. The universal acclaim

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17 H.B. Stoney: op. cit., p.18

and reluctant implementation of Buchanan's urban traffic study (23) would suggest so. Hobart's growth illustrates the range of adaptation to developing needs and functional provisions. The stone hospital which lay just beyond the town boundary in South Hobart (Figure 15.21) is now an integral wing of the much expanded St. John's Hospital; the Exhibition Building on the Domain in 1895 (Figure 15.22) is one of the few major structures to be completely razed. In the central area the demolition of the fire-prone residuals of the poor-standard eastern locality of Figure 14.11 was beyond debate (Figure 15.23); one block from the Elizabeth-Liverpool intersection the removal of sturdy stone buildings (Figure 15.24) for extensions to the main hospital progressively expanded over the original block since the 1820s clearly reflected segregation of uses -- this time in response to administrative action rather than land values. And finally, its function transferred to the eastern shore, the convict barracks and later gaol came down in the interests of traffic circulation (Figures 15.25, 15.26), leaving only the former penitentiary Chapel, for over a century used as the Criminal Court with little exterior modification to match its spiritual decline.

The illustrations do not answer the questions, but the point to be made is that they may be answerable. The relationship between function and fabric must continue unbroken, yet the consistency of their interaction awaits investigation. It may be less haphazard than it seems, and it may be in some measure predictable; the physical changes have been observed widely and long. Thus, of New York's Broadway in 1862: "Twenty years ago it was a street of three-story red brick houses. Now it is a highway of stone, and iron, and marble buildings. The few older ones that remain are individually remembered as among the best of their kind and time, are now not even quaint, but simply old-fashioned and unhandsome."[18]

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[18] W. Smith (ed.): Cities of Our Past and Present, p.115 (24).

Fig. 15.01 Tasmanian Imperial, Macquarie Street, East, late nineteenth century (extant). See accompanying text.

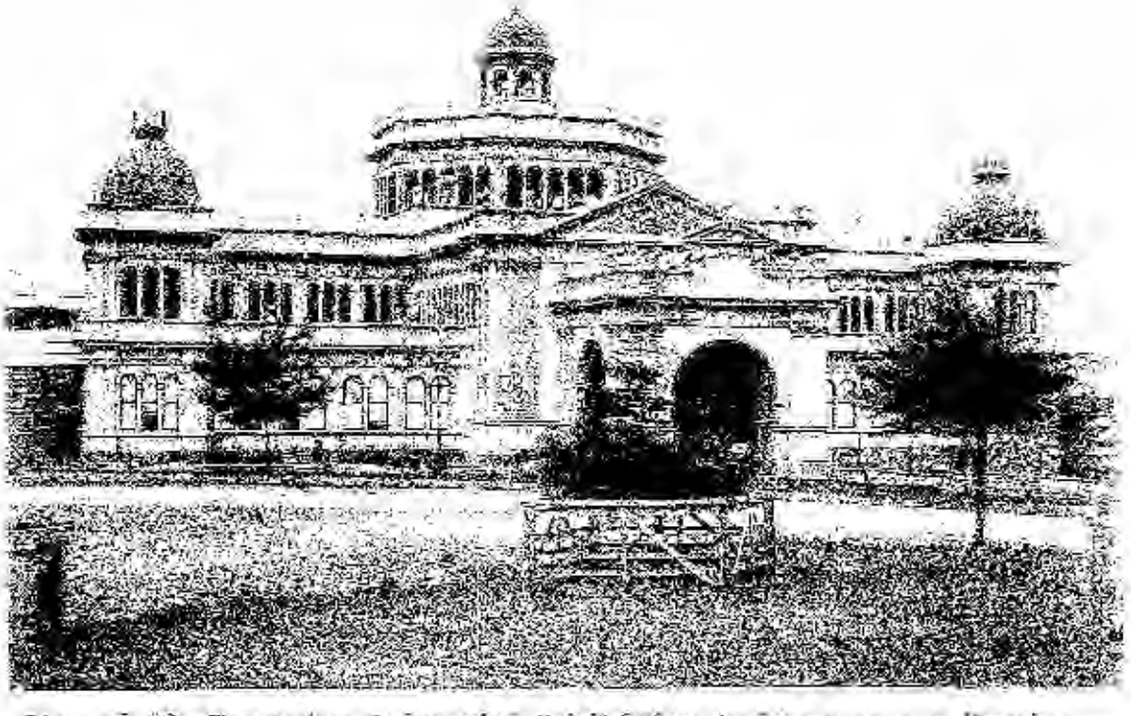

Fig. 15.02 Tasmanian industrial exhibition building at the Domain, 1894-95 (Tasmanian Museum and Art Gallery).

Fig. 19.23 Building removal between Lower Peck and Deaphall Streets, 1967, makes way for temporary parking. Preservation building at Lee Parish Hall at rear.

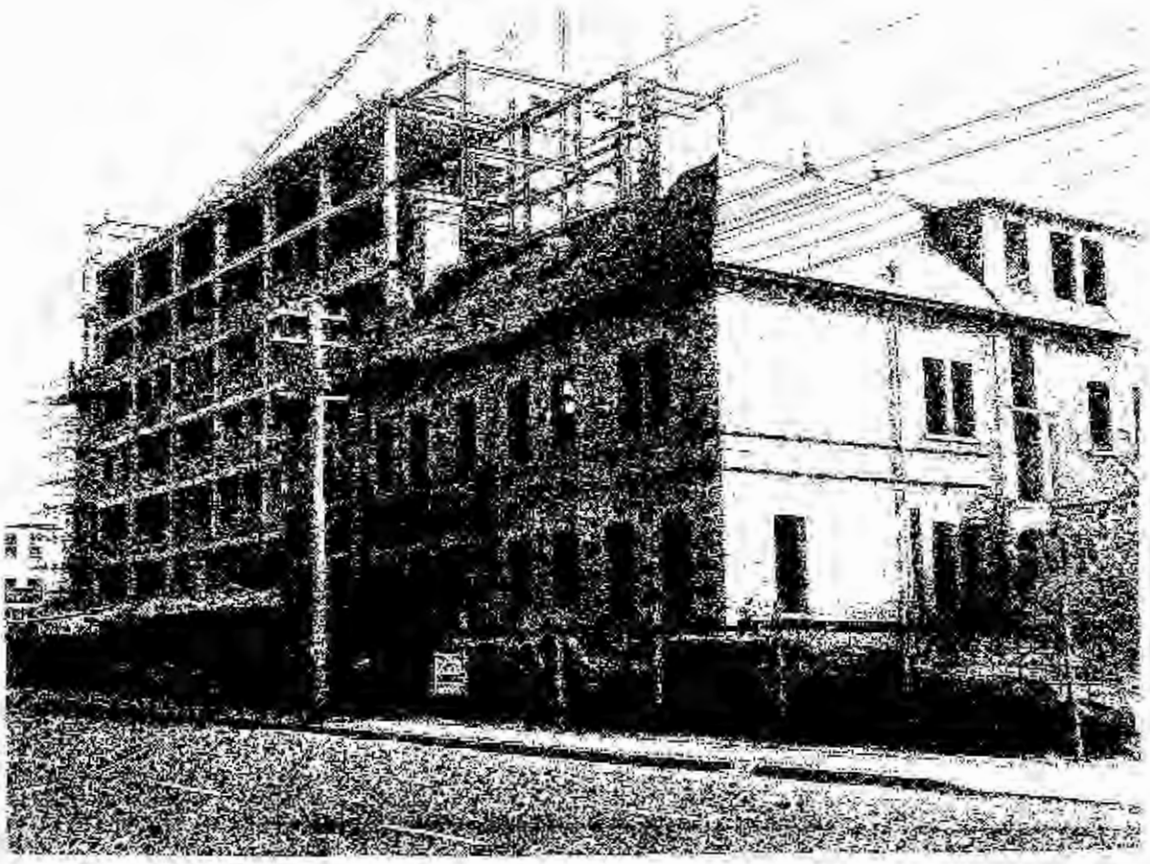

Fig. 19.24 Stone building on Argyle Street (between Gallitzin and Liverpool) under demolition for hospital expansion, 1967. One of many buildings acquired by the Redevelopment Department. Stone, cavity and screws. Debris Scattered on the ground.

Fig. 15.25 Hobart Gaol, Campbell Street, 1960. Originally the convict barracks. In 1842 the maximum number of inmates was 482.

Fig. 15.26 Demolition of the gaol in 1965 exposes the original Presbyterian Church built in 1824 and its larger successor, the Scots Church in Bathurst Street, built 1834.

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Chapter 16

Port Structure, Trade Patterns, and External Security

A major section of inner Hobart, both of its fabric and its function, continued to be the port. Its function of exchange was absolutely basic to the capital's increasingly normal role as a 'trading town', and the warehouses backing the wharves formed the link between production of the land and commerce of the sea. The population drove and promenaded along its margins with keen delight (Figure 8.8) and the port zone was by its nature distinctive. It will therefore be examined in that light.

In 1847 the major work of reclaiming the western shore of Sullivan Cove was in full pursuit. The lighter stage of early port function associated with the use of Hunter's Island as a store had been supplanted by the development of the Old and New Wharf margins. The western margin adjoining the body of the town was being pushed forward of its original alignment from the New Market Place to the Old, allowing for several new small blocks for building purposes and two docks. Constitution Dock bounded by the reclaimed extensions of Argyle and Davey Streets was opened in December 1850, leaving the much larger open-ended haven of Fisherman's Dock between its northeastern side and the Old Wharf. By 1858 the marginal quay known as Franklin Wharf had been decked with timber, carrying across the entrance of the larger dock, and by the addition of stubby piers projecting into the cove a new phase in the port's evolution had begun (Figure 16.1).[1]

1 This was the inheritance of the Marine Board of Hobart, established in January 1858. Previously the port was in control of variously named appointees of the Governor -- Naval Officer, Port Officer, Harbourmaster -- whose responsibilities were ill-defined. The death of the incumbent Port Officer in 1850 on the eve of unprecedented development revealed weaknesses resulting from the lack of consistently administered policy. Denison set up a board of enquiry whose recommendation that a new Port Officer should head the Marine Department of the whole colony was implemented. However, with the growth of merchant influence (the Hobart Chamber of Commerce was established 1851) Boards to superintend maritime affairs at either end of the island were established, thereby involving the users of the port in its administration (as proposed in a minority submission of the board of enquiry). The Hobart Marine Board's jurisdiction extended far beyond the Derwent, covering the coastal waters up to Lat. 42°S. Except for the detachment of the southwestern coast down to South West Cape on the formation of the Strahan M.B. in 1892 the area of control remains much the same.

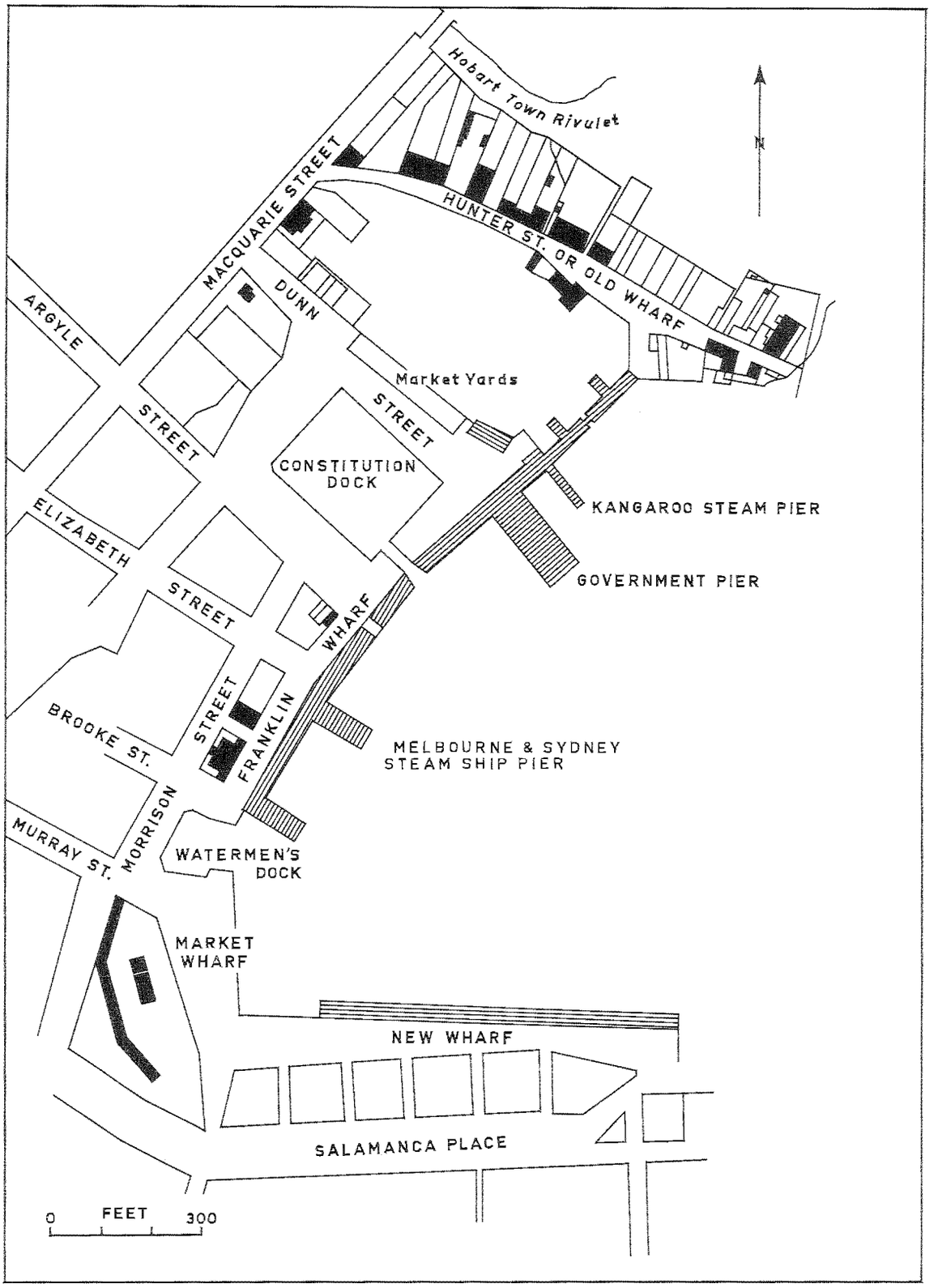

Fig. 16.1 Structure of the port in 1858. The western shoreline has been pushed forward 300 feet and more, Franklin Wharf has been timber-faced, and short finger piers have been constructed. Buildings north of Hunter Street as in 1850 (Sullivan Cove, 1858, Marine Board of Hobart; Hobart No. 39, Lands & Surveys Dept.).

That the improvements were needed is beyond doubt. The Victorian goldrush which effectively stultified Hobart's population growth had no such effect upon shipping movements of the day, if for no other reason than that any exodus of population could only be effected by sea. From just over 400 ship arrivals in 1850 there was a rapid build-up to a record figure of 643 interstate and oversea vessels in 1854 (70 percent of them from Victoria), a total not again attained during the ensuing century of port function. In the previous year there were 634 Hobart arrivals, and Hobart and Launceston together cleared more than 1000 vessels, the composition of which is shown in Table 16.A. Immigration from Britain was substantial, whaling was flourishing, wool exports

Table 16.A

Shipping Arrivals and Departures 1853

From/To	Vessels		Tonnage	Av. Tonnage
	No.	%		
Arrivals				
Gt. Britain	75	7.3	30,550	407
British Colonies	929	90.7	156,208	168
U.S.A.	6	0.6	2,323	387
Foreign States	14	1.4	3,339	239
Total	1,024	100.0	192,420	188
Departures				
Gt. Britain	20	2.0	8,920	446
British Colonies	924	94.3	166,396	177
U.S.A.	3	0.3	1,028	343
Foreign States	34	3.4	11,935	351
Total	999	100.0	188,279	188

Source: Statistics of Tasmania (1)

increased steadily and the value of timber exports sky-rocketed, to maintain for a few years a high level of activity if not the peak movement of 1853-54. Thus annual arrivals in excess of 400 in each year 1850-1858 and annual net tonnages over 100,000 from 1853 to 1857 had to be accommodated, in the main, at the Old and New Wharves. The Marine Board's first major contract involved, in 1859, re-decking 840 feet of New Wharf which was the main whaling

berth (Figure 16.2) and subject to oil spillage. Lack of funds prohibited its eastward extension for the time being.

Developing Finger Piers

The beginning of finger piers was a fundamental change in the structure of the port. Marginal wharves clearly do not make the fullest use of a port anchorage, and the common solution to the problem of increasing land-water penetration is to extend the land into the surrounding water. This usually implies the existence of sufficient depths of water for the expected shipping, as was the case in Hobart; the extension of the land base to the line of Franklin Wharf gave the better part of 30 feet of water along most of its length, and the further protrusion of piers added to the potential draft to be accommodated. The main alternative to this form of provision, best exemplified by the port of New York, is dock or basin accommodation such as provided in the low, flat terrain and unconsolidated sediments of northwest European ports, for instance Rotterdam (2). This is particularly appropriate when access is by narrow river channel which cannot carry projecting piers without hampering traffic movement -- London is an example (3). Hobart did not quite achieve the best of both worlds, for the two docks are not of the size or depth to accommodate merchant ships, but given the small size of the Cove the solution chosen appears to have been a good one. Development now took the form of extending the pier structure, as well as the older quays, to serve the commodity exchange of the growing settlement.

The loss of population to the mainland, a consequent decline in the birth rate from 39 per 1000 in 1856 to 30 in 1869, and a falling-off of the brisk trade with gold-feverish Victoria ensured that Tasmania would no longer threaten N.S.W. or Victorian supremacy in matters economic or demographic.[2] Further emigration to the

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[2] An account of the economic stagnation of the period is given by W.A. Townsley: Tasmania and the great economic depression, 1858-1872, Pap. & Proc., Tas. Hist. Res. Ass., 4, 1955, pp.35-46

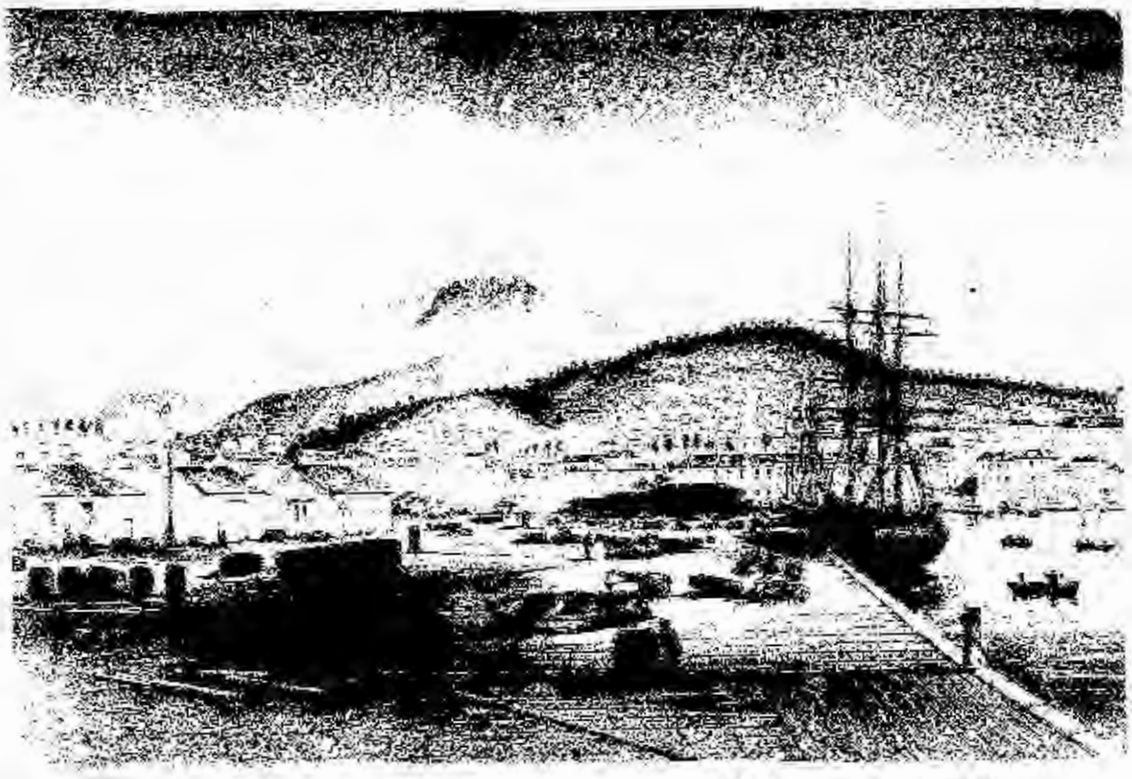

Fig. 15.2 Westward along New Wharf, *circa* 1855. Timber decking and barrels of whale oil are evident (By N. Grant Lloyd, Dr. C. Craig's collection).

Fig. 15.3 New Wharf in 1864. Untidy open storage, mainly of timber, and small huts on the wharf apron are notable (Tasmanian Museum collection).

New Zealand goldfields in the 'sixties[3] compounded these circumstances, and vital as shipping was to the community even the advent of steamers to the inter-colonial trade could not prevent a progressive decline in traffic. From 1857 to 1872 (Table 16.B) the number of annual arrivals dropped from 547 to 195 and their tonnage from 105,000 to 50,000.[4] In Tasmania as a whole imports fell from £15.2 to £8 per capita during 1857-1865 and exports were

Table 16.B

Hobart Shipping Arrivals 1850-1873

Year	Ships	Tonnage	Year	Ships	Tonnage
1850	412	78,151	1862	327	63,694
1851	486	87,563	1863	354	71,501
1852	453	88,124	1864	356	72,654
1853	634	122,828	1865	253	56,113
1854	643	130,620	1866	227	54,568
1855	524	104,817	1867	222	49,085
1856	520	101,472	1868	223	52,201
1857	547	105,528	1869	218	51,168
1858	483	90,625	1870	218	51,866
1859	387	71,879	1871	206	50,242
1860	362	66,858	1872	195	49,846
1861	356	67,373	1873	213	55,797

Source: 1850-56 from Compilation of shipping arrivals 1803-1856, State Archives; 1857-1873 from Statistics of Tasmania; except 1854 and 1872 calculated from Reports of Ships' Arrivals, Accession 119, State Archives. This last excludes naval vessels and usually provides a smaller total than the published Statistics. Alternative figures for 1854 and 1872 are very nearly identical.

similarly reduced in per capita value from £16.2 to £9.3. The annual value of exports stayed below £1 million from 1860 to 1874 inclusive and the import position was equally depressed between 1861 and 1872. In Hobart the decline was more severe: exports dropped from about £38 per head of urban population in the years 1852-54 to

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3 F.K. Crowley: Immigration into Tasmania from the U.K., 1860-1919, Pap. & Proc., Tas. Hist. Res. Assn., 3, 1954, p.104 (5)

4 It should be noted that tonnage declined less severely than ship numbers, implying rather more goods movement than arrival statistics alone may suggest. The average ship size increased from 192 tons to 256 tons during the period.

about £21 in 1863 and £17 in 1868. Imports declined in like manner.[5]

Despite the decline in the volume of shipping and in the flow of goods there was an increasing need for steamship accommodation. This resulted in the construction during 1866-67 of a 180-foot pier immediately opposite the end of Elizabeth Street to replace the shorter Melbourne and Sydney Steamship Pier of Figure 16.1. There was sufficient pressure on the available facilities for the Marine Board to resolve in 1871 that the New Wharf should be reserved during October-March "for London, other foreign ships and whalers only".[6] Objections were frequently raised to the exporters' practice of stacking timber on or near the wharves, where it hampered activity and even endangered the stability of wharves weakened by marine organisms (Figure 16.3). In 1874-75 the Elizabeth Street pier was joined on the north by a new finger pier 250 feet long and 50 feet wide, and within a few years the old Government Pier (Figure 16.1) had been replaced by another which when extended to 400 feet in 1882 formed the longest structure yet built into the waters of the cove, reaching past the general line joining the Brooke St. Pier to the seaward edge of the former Hunter's Island (Figure 16.4). The rather subdued piers of the late 1850s had evolved, then, into finger piers in the modern sense, and by the early 1880s the port was considerably better equipped to handle the growing number and size of ships than it had been to cope with the unprecedented influx of the years between 1847 and 1858.

It can be fairly claimed if not authoritatively substantiated that the lean trading years of 1857-1872 did little or nothing to weaken the town's identification with the port. It may even, as in the earliest years of irregular arrivals, have focussed the people's attention more sharply on this zone of contact with the world outside. There was much interest in ships, the waterfront, its slips and its pubs (6). From the point of view of townscape,

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5 Calculated from Statistics of Tasmania and Almanacs

6 Marine Board of Hobart: Minutes

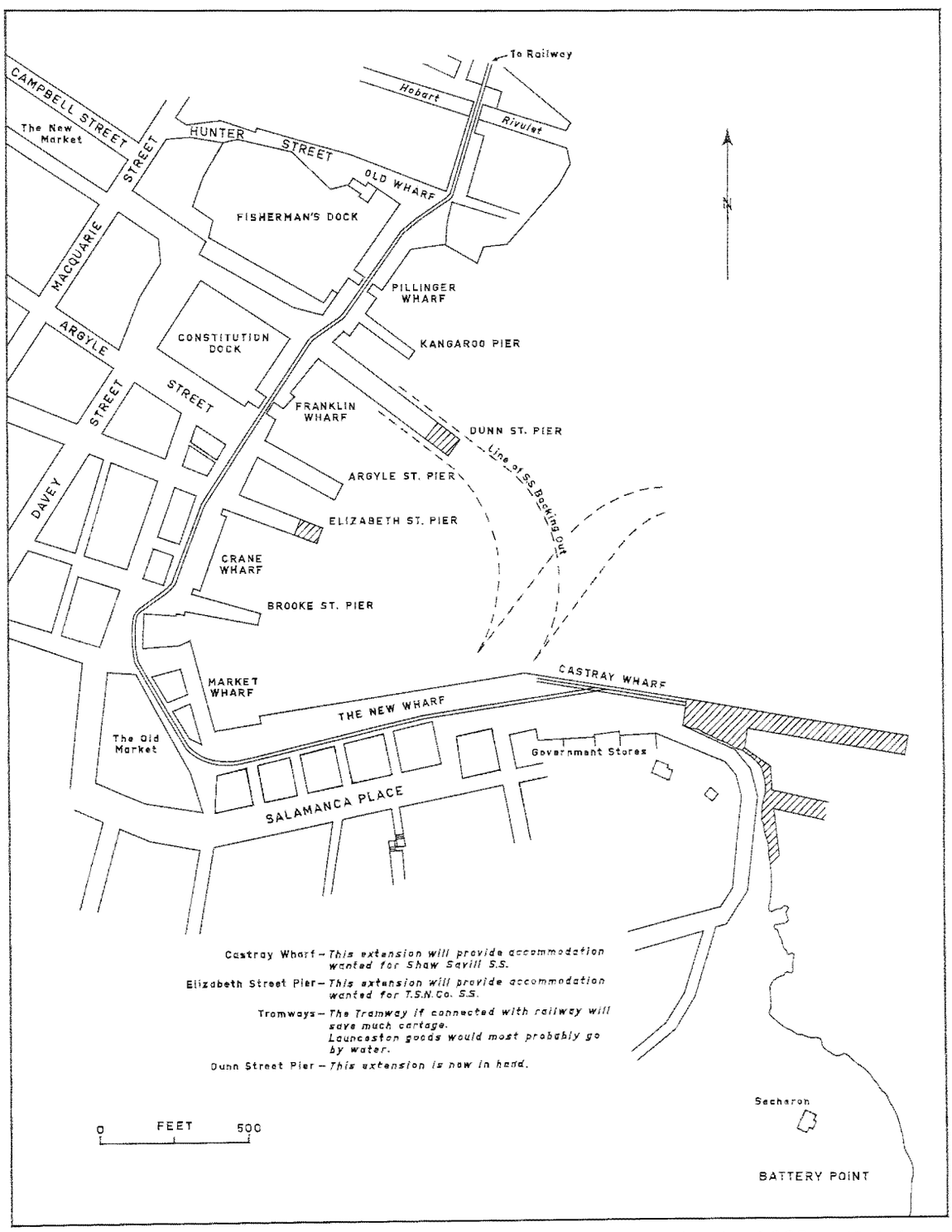

Fig. 16.4 Port structure and development proposals in 1888. Neither the encircling tramway nor the Castray Wharf piers eventuated (Hobart Wharves, Improvements Proposed, 1888, Marine Board of Hobart).

interest the port was rarely more in focus, though this might admittedly obtain in adverse circumstances of the kind not at once superficially observable. Two of the best representations of the port and town before the advent of aerial photography appear as Figures 16.5 and 16.6. It was also at this time that Sir Charles Du Cane, after appraising the site at least as enthusiastically as early colonial observers, envisaged a hinterland potential which would enable the population to treble and quadruple "and carry the city along the banks and valley of the Derwent."[7] Whatever the import of these matters it may be appropriate to remember at this juncture that vital as the port and the land-water zone were to Hobart (and its hinterland), its operation was very small by some standards. We find, for example, that "on a single day in 1873, 135 lumber-laden schooners arrived in Chicago",[8] and these ships were mainly in the 200-400 tons size range. New York of the 1860s had added to its natural advantages "more than three hundred piers and bulkheads", the island waterfront alone offering "accommodation for the simultaneous landing of eight hundred first-class foreign cargoes".[9]

The Steamship Era

Change in the port structure during the 1860s and 1870s was concerned with replacement and improvisation rather than new concepts of development. Berthing frontage was significantly increased, but in 1888 there was only one pier more than in 1858 (cf. Figures 16.1 and 16.4). After 1872 when the number of interstate and oversea arrivals fell below 200 for only the second time since 1838 (the other being the peak recession year 1843) there was a steady re-growth of port traffic, so that in 1888, 1889 and 1891 arrivals were again in excess of 300, before the 1890s depression

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7 Sir C. DuCane: Tasmania -- Past and Present, p.41 (7)

8 H.N. Barkhausen: Great Lakes Sailing Ships, p.1 (8)

9 W. Smith: Cities of Our Past and Present, p.119 (9)

Fig. 14.1 Aerial view of part of the Bermuda Islands. The capital, Hamilton, is on the peninsula in the centre of the picture. The Causeway, Somerset Bridge, and St. David's Island are visible in the distance. (Courtesy of Cruiser, Tempest Photographic).

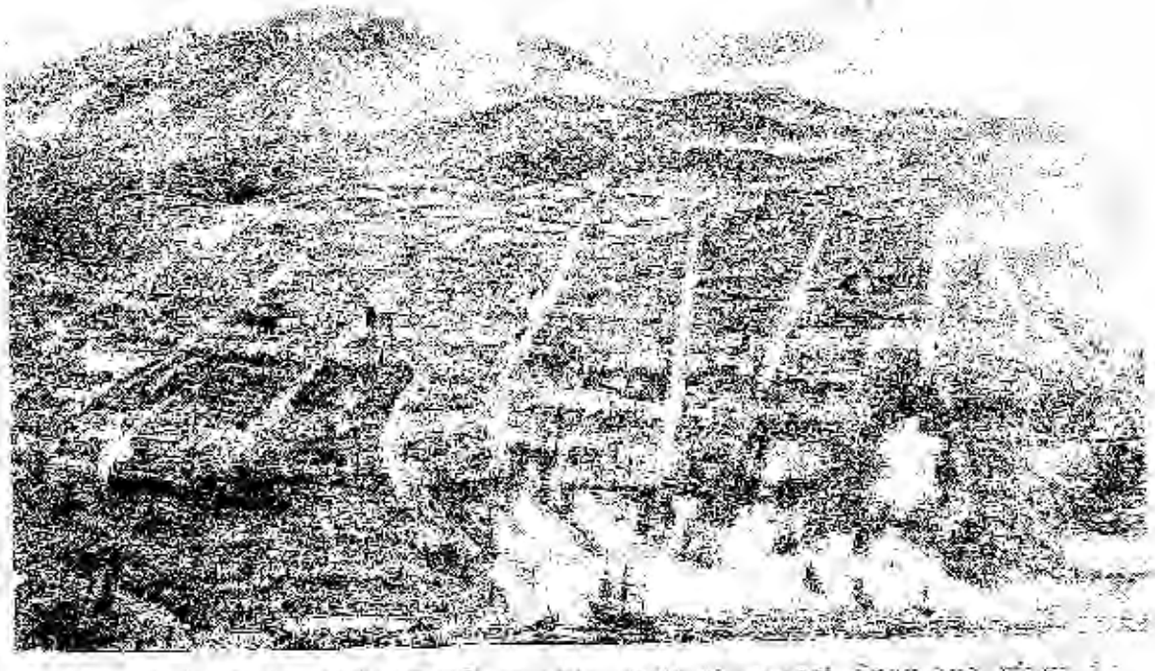

Fig. 14.2 Simplified aerial photograph of Lough Erne (see text for key). The castle is Portora. Note the peninsular nature of the eastern portion. Scale 1 cm. = 1 km. (Courtesy of Cruiser, Tempest Photographic).

produced reductions again.[10] More important for port facilities was the rapid increase in ship size and volume, stemming from the now appreciable participation of steel steamships in trading activity. As early as 1805 the average net size of ships using the port of Hobart had surpassed 200 tons. The average in 1830 reached 314 tons, but 300 tons was not again surpassed until 1877 and in the interim the annual average frequently dropped below 200 tons. After the later 1870s the change was rapid, and to the providers of port facilities, doubtless startling: average ship size increased by over 100 tons between 1877 and 1880 (309 to 413 tons), and then doubled by 1889 to 856 tons (Table 16.C).

Figure 16.4 indicates the manner in which the new traffic was to be accommodated: by small additions to the Dunn and Elizabeth Street Piers and by major extension of the New Wharf, first as a wharf and then as a pier. The connection of this farthest berth to the railway system was a logical plan, but one never to be fully implemented. The import from England in 1882 of a steam crane and dredge assisted initially in accommodating the larger vessels. Water around the piers was deepened, as also Constitution Dock. The City Council transferred its water frontages to the Marine Board in 1888 in return for cash and the right to reclaim land at the head of Fisherman's Dock. The reclamation was completed in 1891 leaving an improved Victoria Dock and a new city block between it and the New Market site. Open-sided sheds were erected on the Dunn and Argyle Street Piers following the importers' concern at the exposure of cargo on open piers.

In 1891 the average size of 321 ships calling at Hobart surpassed 1,000 net tons for the first time and the problem of providing regularly for a 20-foot draft had to be dealt with. A political as much as a physical solution was needed, for local vested interests were involved. The issue was whether the north or

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10 Statistics of Tasmania show 374 arrivals for 1892 whereas Ships' Arrivals add up to 291, with a tonnage 5,000 greater than the 367,000 tons of the published record, which precludes the possibility of the higher ship number deriving from the inclusion of coastal vessels.

Table 16.C

Size of Ships at Hobart 1803-1904

Year	Av. Net Tonnage	Year	Av. Net Tonnage	Year	Av. Net Tonnage
1803-04	93	1835-39	229	1870-74	258
1805-09	196	1840-44	207	1875-79	307
1810-14	195	1845-49	169	1880-84	478
1815-19	106	1850-54	195	1885-89	777
1820-24	135	1855-59	193	1890-94	1081
1825-29	221	1860-64	195	1895-99	1298
1830-34	246	1865-69	230	1900-04	1757

Source: Statistics of Tasmania and Reports of Ships' Arrivals (10)

south side of the harbour should be developed. Commercial interests were divided. Both views were represented on the Marine Board and were supported and opposed by the petition and counter-petition of merchants, shipowners and citizens. A close decision for northern development taken in 1888 could not be implemented at once, and as a temporary expedient it was resolved to lengthen the Dunn Street pier by 50 feet.[11] The pier offered 24 feet of depth at low water, but its length was less than the longest steamships then visiting Australia. Delay followed indecision into 1890 when southern development was decided upon and action was at last taken, to extend New Wharf by 450 feet. Two-thirds of this length would project into the cove as a pier, leaving a small boat harbour like that in Figure 16.7

The depressed economy of the early 1890s and pest problems in the orchard industry combined to reduce the Marine Board's revenues and defer major developments. However, the small Ferry Pier was built on the other side of Watermen's Dock from Brooke Street Pier (Figure 16.7), and in the last years of the century the older timbers of New Wharf were extensively renewed. Recurrent silting at the mouth of the Hobart Rivulet about this time produced friction between the Marine Board and the City Council through whose property the stream flowed. In recognition of the fact that "the smell from the rivulet affects the travelling public crossing the harbour by the Bellerive and Beltana [ferry] steamers and is also against the

11 Marine Board of Hobart: Minutes

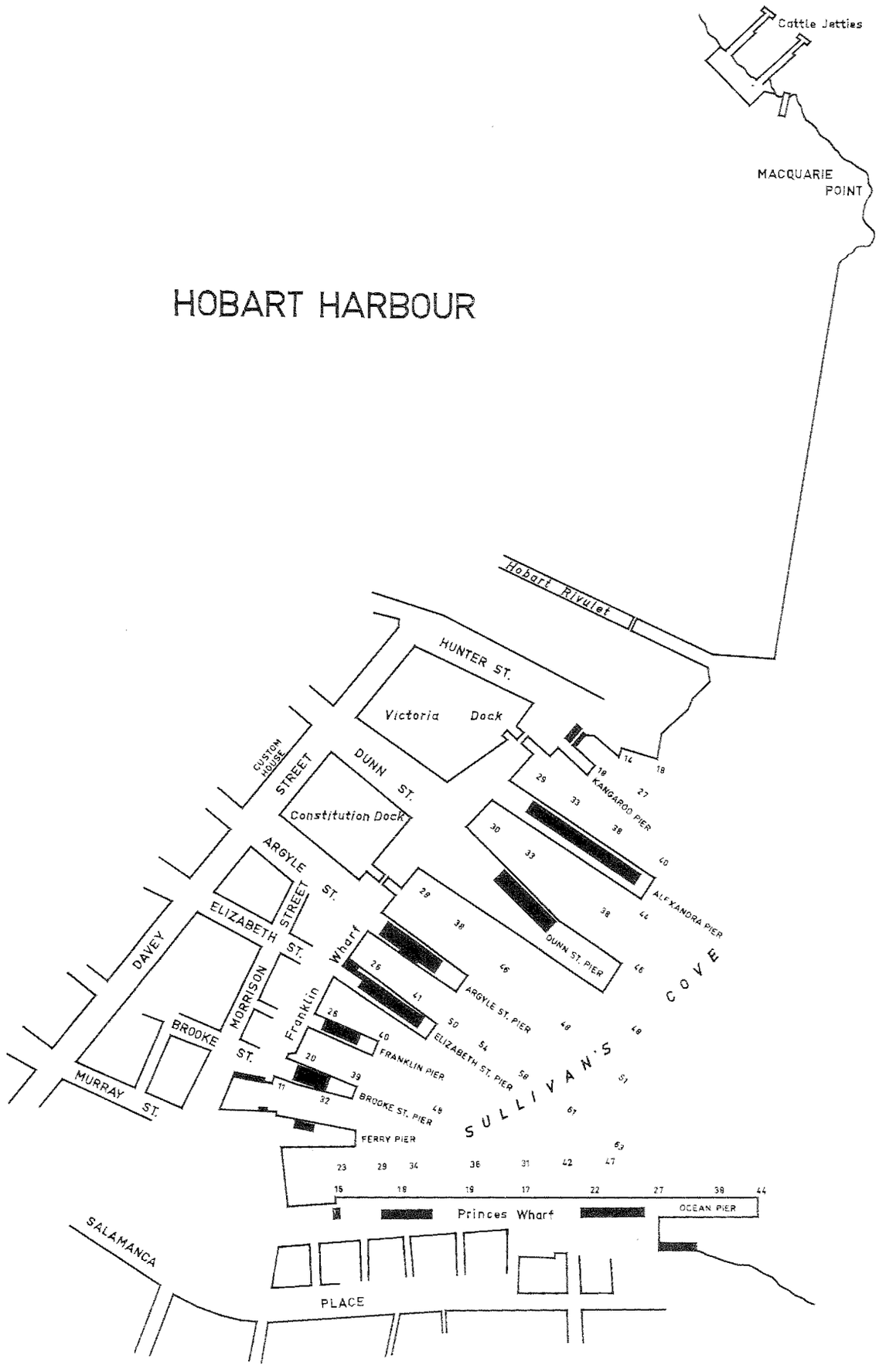

Fig. 16.7 Port structure in 1904. Wharf sheds in black, soundings in feet. Scale approx. 500 feet = 1 inch (Hobart No. 124, Lands & Surveys Dept.).

interests of shipping anchored in the harbour" the Marine Board made its dredging equipment available and shared the cost of operations.[12] Another cleaning-up programme related to the Old Market area where untidy storage was an eyesore. As Figures 16.8 and 16.9 show, the whole corner of the port zone including the market itself was thoroughly renovated by 1901.

The number of vessels using the port was constantly below 300 for each of the years 1892-1901 although the tonnage generally increased, to reach 400,000 for the first time in 1900. Only three of the 241 arrivals in that year were smaller than 200 tons and 54 percent were between 1000 and 5000 tons: a great change in the space of three decades, for in 1872 95 percent of arrivals had registered less than 500 tons apiece. The port did well to maintain a moderate traffic toward the end of the century in the face of the economic depression of the 1890s and, more fundamentally, the shift in State population emphasis over the last few decades. Between the censuses of 1870 and 1901 the percentage of Tasmanian population living in the southeastern quarter of the island fell from 52 to 38, and although Hobart increased from 25,000 to 35,000 its share remained stationary at 21 percent of the State total.

Twentieth Century Resurgence

With the new century came improved trade conditions generally and an increasing volume of shipping to the port. Over 300 vessels entered the Cove each year from 1902 to the eve of World War I, with the average size of ship passing 2,000 tons for the first time in 1908, when 77 percent of the traffic exceeded 1,000 tons. This was also the first year in which total tonnage exceeded 3/4 million. It was only in 1900 that arrivals first averaged more than 1,500 tons and not until 1902 that the annual volume of the carriers reached 1/2 million tons, so that the change in character was marked.

To meet these greater demands on berthing facilities substan-

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12 Ibid.

Fig. 16.8 Old Market sheds and storage in front of the Custom House, c. 1870 (Tasmanian Museum collection).

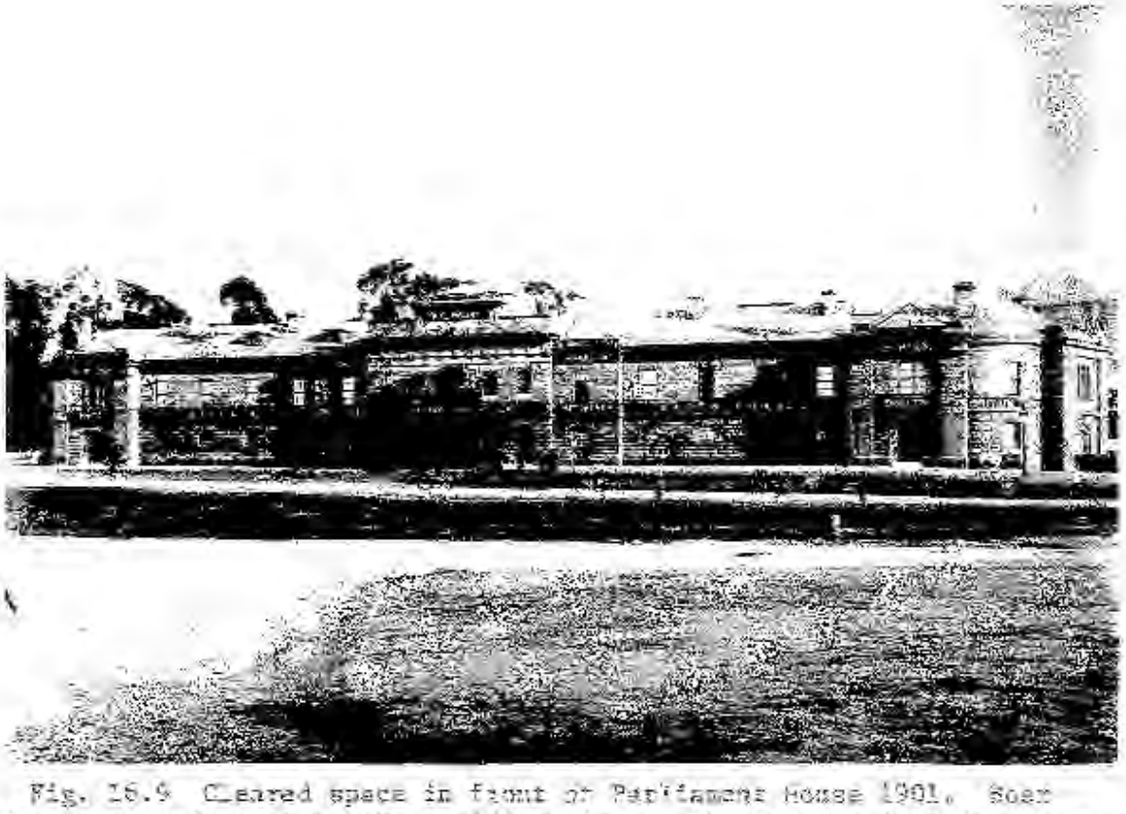

Fig. 16.9 Cleared space in front of Parliament House 1901. Soon War peace indicated by the building signs. The Customs function about to be housed near Constitution Dock (Tasmanian Museum collection).

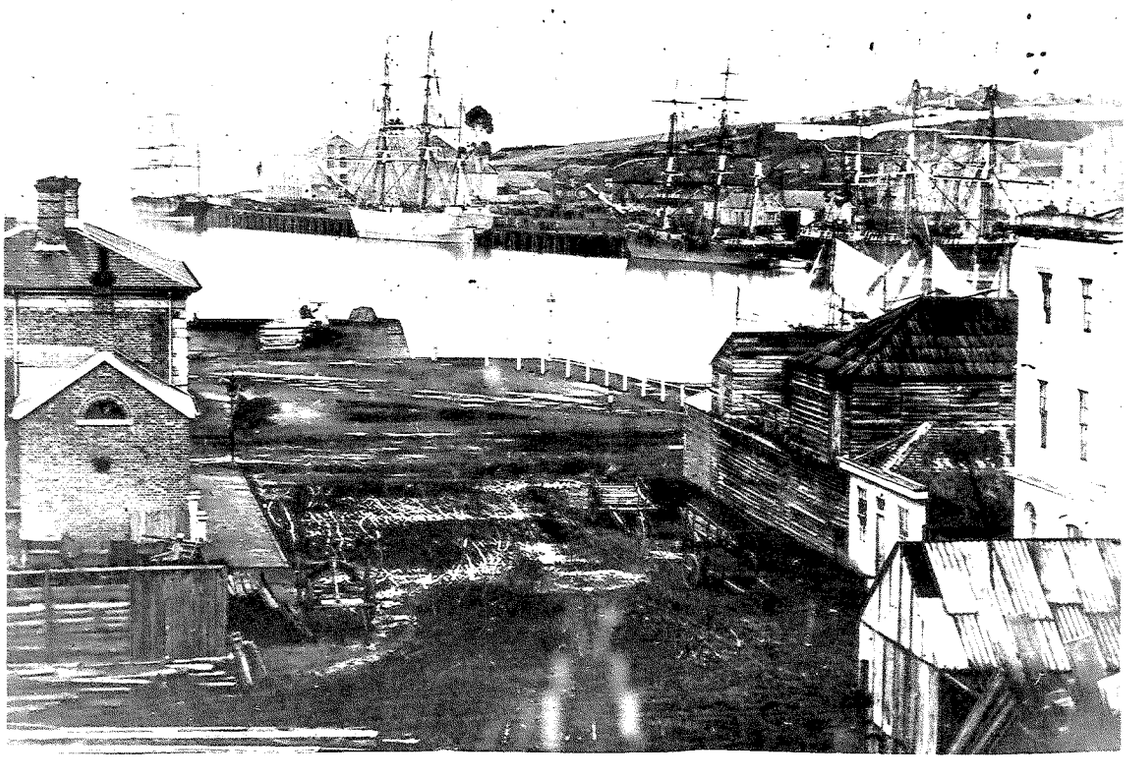

Fig. 16.10 Franklin Wharf and New Wharf from the Davey Street steps, 1860. Poor standard buildings and storage facilities evident (cf. Figure 16.3). (Tasmanian Museum collection)

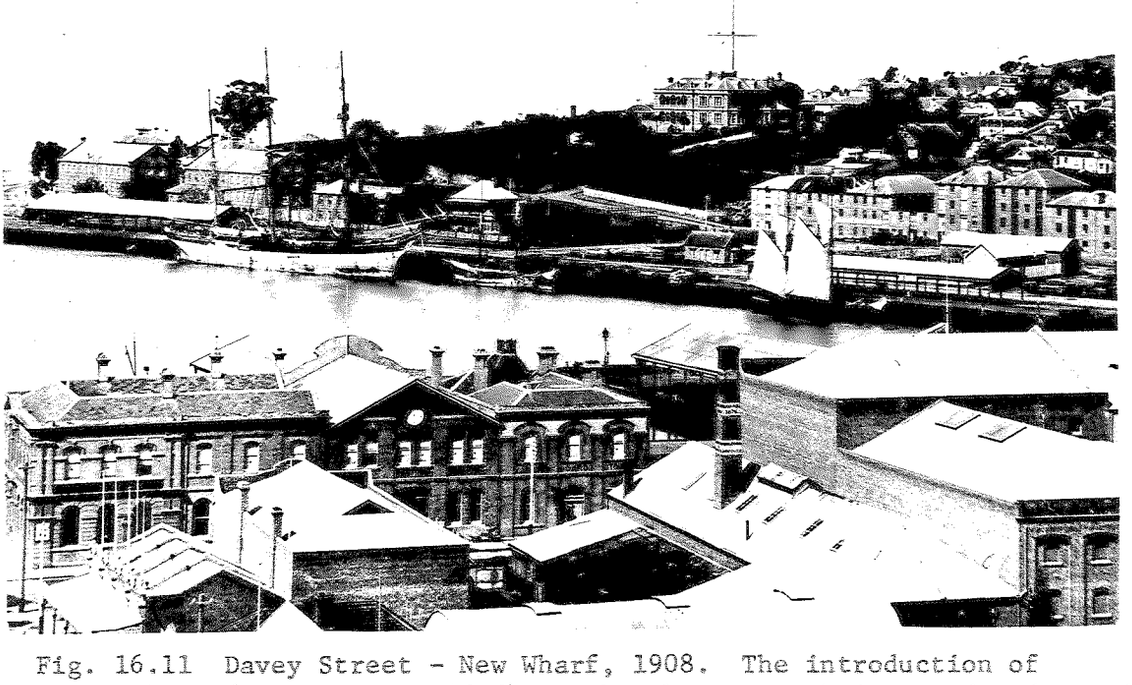

Fig. 16.11 Davey Street - New Wharf, 1908. The introduction of storage sheds (as yet open-sided) on the wharves much improved order and accessibility.(Tasmanian Museum collection)

tial new construction was undertaken, with a general northerly shift in locational emphasis. However, Prince's (formerly New) Wharf was not immune from the implications of increasing ship size, and the removal of submarine rock was needed to give 30 feet of clearance at low water. This project was combined in a contract of 1906 with the widening by ten feet of more than 1000 feet of the wharf and pier. The general need for sealed storage sheds in lieu of open storage areas or even open sheds had now been accepted in principle, and some improvement of circulation in the pier surrounds was effected, as exemplified in Figures 16.10 and 16.11. Major expansion began with the construction of Alexandra Pier (559 x 45 feet, with 400-foot shed) during 1901-03 between the large Dunn Street Pier and the entrance to Victoria Dock (Figure 16.7). In 1908-10, with the structure of the port having developed as in Figure 16.7 (and Appendix XXXIV), King's Pier, 650 x 100 feet and with a 500-foot shed, became the largest pier yet built in the port (Figure 16.12). It replaced the Dunn Street Pier, and Alexandra Pier was renamed Queen's.

Then, toward the end of the first decade of the century, the Marine Board looked to a new area of possible development -- Macquarie Point beyond the Rivulet. The Port of Hobart Improvement Act of 1910 gave authority to divert the rivulet, and the Sydney Harbour Trust was brought in to advise on port extension. The work was of major proportions, involving reclamation of four acres seaward of the former island and the underground diversion of the rivulet to an outfall north of Macquarie Point. By early 1914 the construction was almost completed of 460 feet of wharf and 750 x 120 feet of pier, continuing the line of Hunter Street (Figure 16.12). The new Ocean Pier carried a 646 x 60 feet cargo shed topped by a flat roof and promenade deck, was linked to the railway goods yard nearby, and reached more than 2000 feet seaward of the shoreline of a century previous where it had bordered lower Macquarie Street, forming the head of Fisherman's Dock.

This phase of development and even the seemingly grandiose

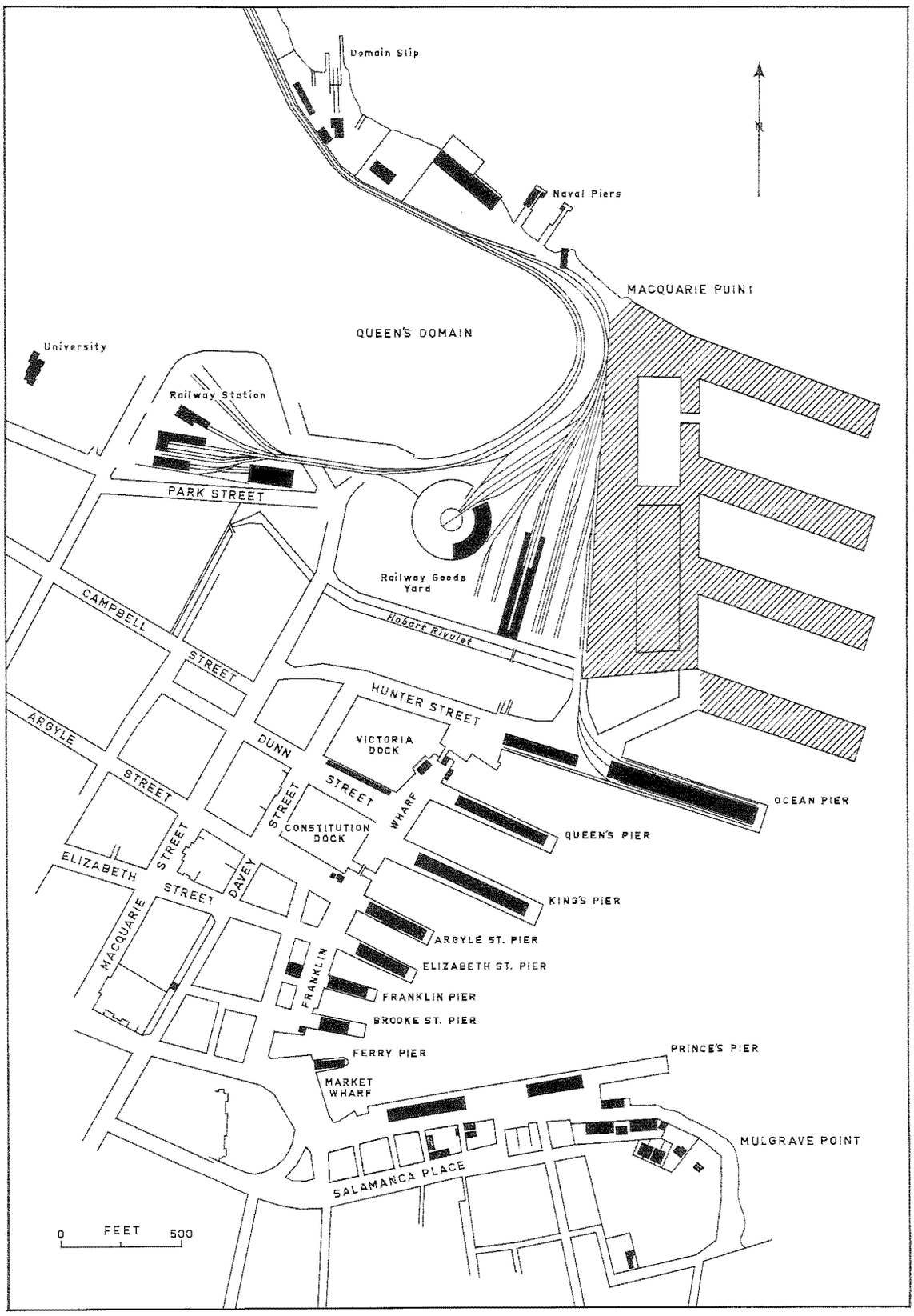

Fig. 16.12 Port structure and proposals, 1916. Finger piers are at maximum development, though unrealised Macquarie Point piers would have greatly extended the concept. Rivulet later diverted to an outfall near the Naval Piers in the north (Hobart No. 132, Lands & Surveys Dept.)

scheme of reclamation and pier construction projected in 1916 (Figure 16.2) were reasonably justified by the trend of trade and the upturn in population growth. Hobart of pre-World War I was more directly on the shipping lanes of the southern hemisphere than at present. It was on the Britain-New Zealand and New York-New Zealand routes, and passengers and mails were transhipped to the Australian mainland. Of added significance was the anticipation of a much larger transhipping function when the draft of ships would increase to a forecast 40 and even 50 feet,[13] thereby placing at a premium a few deep-water, accessible, and inexpensively maintained harbours such as Hobart's. It is only in the 1960s that developments in the super-tanker field of ships over 200,000 tons has made this kind of draft a reality, but it seems unlikely that site advantage would overcome locational peripherality in any consideration of Hobart as a distributional focus for mainland petroleum imports, or, in respect to container cargo centralisation, that the leading national consuming points would be by-passed.

Shipping movements were of course disrupted by World War I and Hobart's traffic immediately declined. Only 212 ships called in 1916/17, the lowest number since 1872. In the following year the volume fell below 258,000 tons, the smallest since 1888, and in great contrast with a 1911-13 average of more than 800,000 tons. Many of the newer ships which had prompted post-1900 developments in the port were on war service, and the average size of ship fell to less than half the 1913 average of 2,526 tons. In 1918/19 only 28 percent of ships reaching Hobart exceeded 1,000 tons, compared with 77 percent in 1908.

Interwar Prosperity

After the war the flow of trade was soon re-established and the pattern through the 1920s closely resembled that of the first

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13 By Professor Sir J.H. Biles, quoted in J. Adams: Tasmanian ports and harbours, p.267 (11)

decade. Each year, between 300 and 400 ships tied up in the port and gradually their total volume rose from the wartime trough to a new record of 883,000 tons in 1927/28, by which time vessel size was almost back to the 2,500 tons average first achieved in 1913. However, it was the 51 ships of more than 5,000 tons which pulled the average up, since 46 percent of the 360 arrivals were less than 1,000 tons, compared with only 23 percent in that category in the prosperous pre-war year of 1908. Only 241,000 tons of cargo was handled in 1919 but by 1923/24 imports alone exceeded 300,000 tons and the total cargo was 597,000 tons. The goods were valued at almost £10 million.[14]

In 1920 the Port Engineer submitted the boldest development plan ever advanced for the port of Hobart (Figure 16.13). The seven large piers would have provided no less than 15,000 feet of deep-water berths, double the wharfage then available at Sullivan Cove. Attention returned, however, to the Macquarie Point reclamation area.

By the late 1920s new bulk storage leases were to provide for oil tanker reception along a wide frontage of Macquarie Point, and further around the Domain slip was remodelled, mainly to accommodate the new Hobart-Bellerive vehicular ferry. A Norwegian whaling unit based itself on Hobart in 1926 and the pursuit vessels made extensive use of the slip. It seemed at this time that most of the annual needs of shipping were provided for, so that future development might be related to the congestion which accompanied the fruit export season (mainly March-May), and the extent to which Port Huon could be used to relieve the pressure. The problem was real but its absolute magnitude small: "If four or five more vessels visit the Huon, the congestion at Hobart, which occurs only during two or three months of the year, would at once disappear..."[15] In 1928/29 the first direct shipment of apples from Port Huon to Britain was loaded and almost a million cases were shipped to interstate ports.

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14 Marine Board of Hobart: Annual Report, 1923/24

15 Ibid., 1928/29

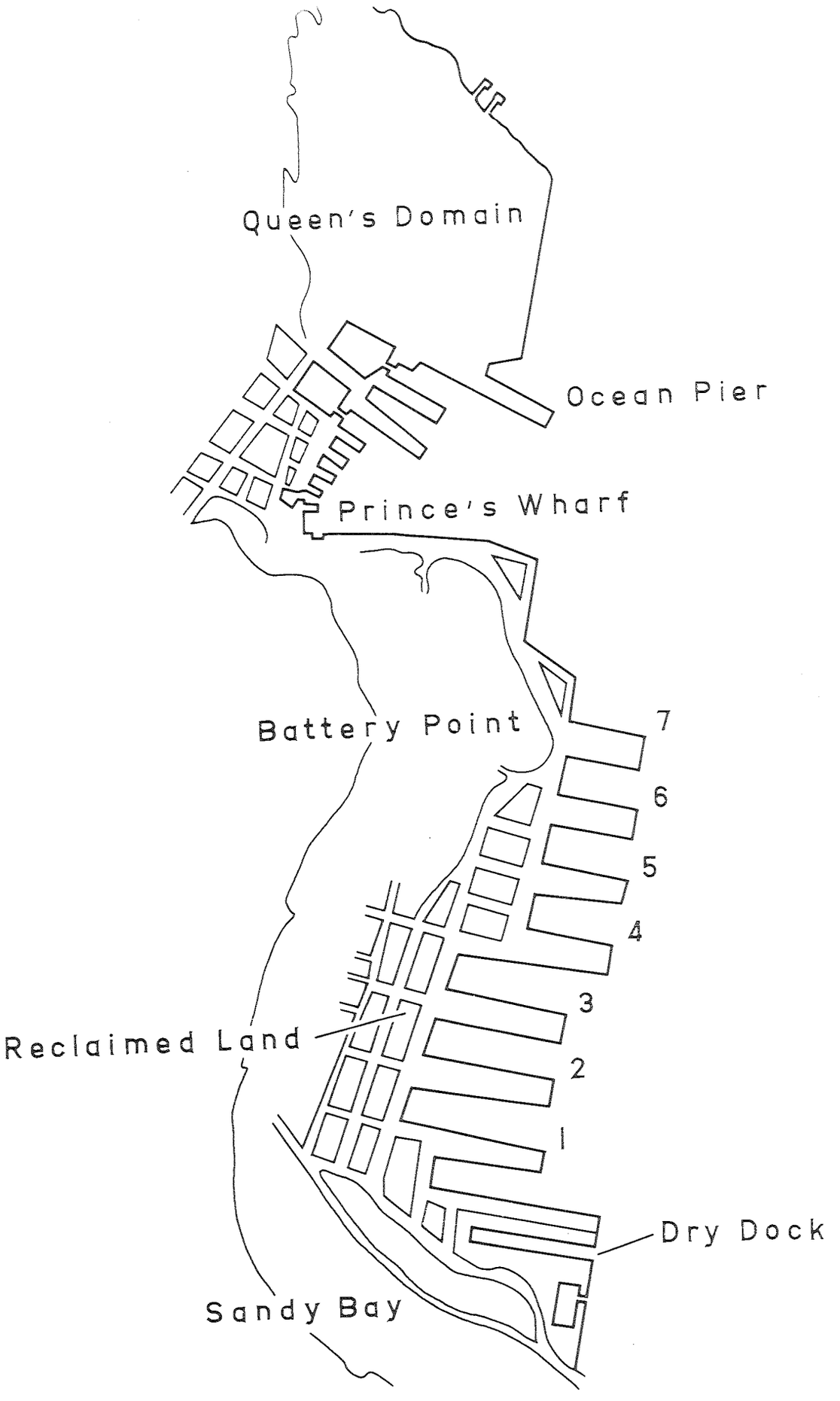

Fig. 16.13 Grandiose scheme for port extension around Battery Point to Sandy Bay, 1920.

The 'thirties was a notable period in Hobart's trading history, as was the nineteenth century counterpart. Excepting the first two years, which in fairly small degree reflected the general economic depression with smaller numbers and tonnages of ships, the volume of traffic grew progressively (Table 16.D). Average ship size

Table 16.D

Shipping Arrivals 1929-1959

Year	No.	Tonnage	Ton./Ship	Year	No.	Tonnage	Ton./Ship
1929/30	322	834,985	2593	1945/46	151	309,190	2047
1931/32	291	747,260	2567	1947/48	192	486,874	2536
1933/34	298	894,931	3003	1949/50	218	589,785	2705
1935/46	336	945,762	2815	1951/52	261	649,651	2488
1937/38	330	1,020,415	3092	1953/54	311	681,651	2195
1939/40	287	665,846	2320	1955/56	290	742,637	2561
1941/42	218	371,967	1706	1957/58	361	843,616	2336
1943/44	163	340,303	2088	1959/60	456	1,230,452	2700

Source: Statistics of Tasmania and Reports of Ships' Arrivals

showed no appreciable increase overall, though in 1933/34 it exceeded 3,000 tons for the first time, and in 1936/67, 133 years after its establishment, the port first received shipping totalling more than one million net tons. This volume was maintained until the outbreak of World War II and then not achieved again for twenty years. The variation in monthly arrivals in 1938/39 revealed the significance of the fruit export season in the tempo of traffic, notably the oversea arrivals (Table 16.E).

During 1931-34 the Argyle and Elizabeth Piers were demolished and a new Elizabeth Street Pier built in concrete between them (compare Figures 16.12, 16.14). The new structure offered 30-52 feet of water alongside, and the rail connection was extended to it. The success of this construction led to the reconstruction in concrete of the whole 1,300 feet of Prince's Wharf and pier together with the sheds. The sequel to much earlier action was then implemented by the replacement (with road, footpaths, and grassed reserve) of the fenced squares of land which had been leased to merchants for storage between the wharf and the warehouses. The

Table 16.E

Monthly Shipping Arrivals 1938/39

Month	Oversea		Interstate		Total	
	No.	Tonnage	No.	Tonnage	No.	Tonnage
July	4	18,968	18	21,368	22	40,336
August	6	29,594	26	27,710	32	57,304
September	9	37,241	17	19,376	26	56,617
October	4	17,025	18	23,928	22	40,953
November	6	27,251	15	19,157	21	46,408
December	9	66,321	19	29,415	28	95,736
January	12	71,608	17	24,414	29	96,022
February	17	101,148	18	26,896	35	128,044
March	23	155,989	21	31,034	44	187,023
April	18	106,694	21	25,927	39	132,621
May	23	141,069	23	28,279	46	169,348
June	6	33,388	16	17,888	22	51,276
Year	137	806,296	229	295,392	366*	1,101,688*

* Calculations of arrival returns gives 360 ships of 1,094,905 tons; Statistics of Tasmania shows 331 ships of 1,058,979 tons

Source: Marine Board of Hobart: Annual Report, 1938/39

differential use of the main general cargo berths was recorded at this time, in terms of cargo handled (Table 16.F). King's Pier was clearly favoured, probably because of its central position in the port. Each of the berths could offer 30 feet of water and was well protected, although the markedly protruding Ocean Pier was most exposed to southerly swell. Prince's Wharf was undergoing reconstruction at its inner end and was probably more occupied by passenger vessels than the other berths.

World War II brought a decline in traffic quite as marked as that of a quarter of a century before, but planning for future development continued in anticipation of a post-war resumption of the trend to ever-increasing shipping volume. The immediate area of Sullivan Cove was fully developed as a pier assembly, and, although a proposal of 1937/38 envisaged the replacement of King's and Queen's Piers and the two docks behind them by one very large

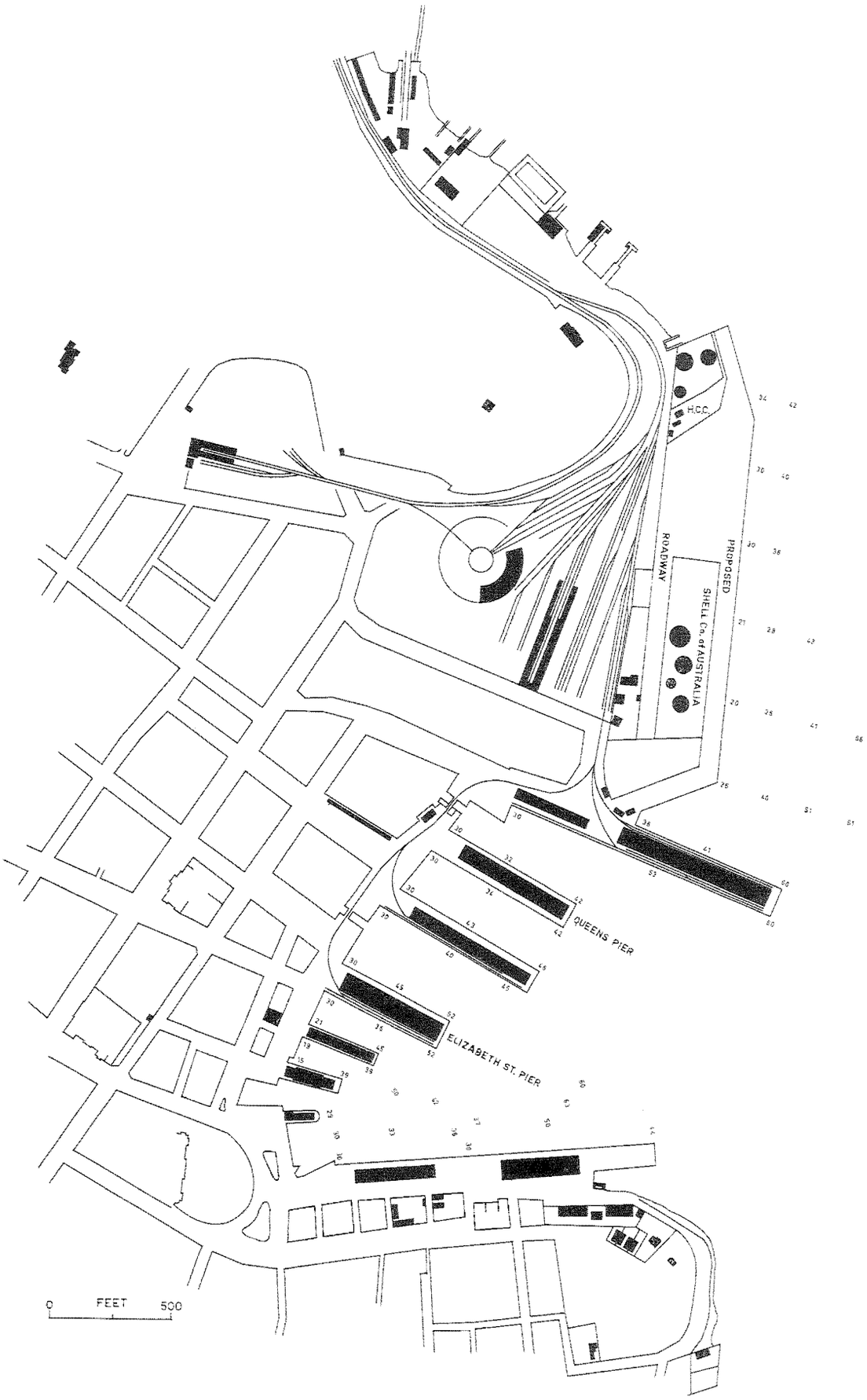

Fig. 16.14 Port structure in 1937. The main change since 1916 (Figure 16.12) is the oil terminal development on Macquarie Point. Soundings in feet. (Hobart No. 146, Lands & Surveys Dept.)

Table 16.F

Cargo Handled at Main Berths 1938/39

Pier/Wharf	Inward (tons)	Outward (tons)	Total (tons)
Ocean	55,762	67,313	123,075
Queen's	13,419	62,033	75,452
King's	83,591	86,054	169,645
Elizabeth	32,267	69,227	101,494
Prince's	86,081	12,551	98,632

Source: Marine Board of Hobart: Annual Report, 1938/39

pier running back to Davey Street, the future lay in the Macquarie Point area of long-standing reclamation.

Finger Piers to Marginal Wharves: The Present Era

The area beyond the old mouth of the rivulet was given active consideration as a berthing site before 1910, and in 1916 a series of large piers parallelling Ocean Pier was contemplated. This ambitious extension of facilities was not needed for many years and by the end of the 1939-45 war development consisted only of a timber wharf adjoining the oil storage tanks. Immediately after the war a scheme for wharfage construction north of Ocean Pier was formulated, providing for 3,600 feet of frontage between Victoria Dock and the rivulet outfall around the Point. Wharfage was the operative word, for what was proposed after almost a century of finger pier construction and reconstruction was the development once again of marginal wharves. Another and fourth stage in the port's evolution was therefore about to begin.

There was good reason for this change in policy: the rather narrow piers had greatly increased the berthing frontage within the confines of a small harbour, but the much greater capacity of modern motor vessels and the need for efficient handling and storing placed the emphasis on larger storage sheds and wider wharf aprons. These requirements could best be met by land-backed wharves. In the absence of a continuous pressure on existing accommodation it was feasible to adopt this space-

consuming plan in the interests of free movement and the avoidance of congestion at individual berths. The two largest of the new berths were to have minimum depths alongside of 36 and 46 feet, ample water for any ship then afloat. It was also envisaged that Ocean Pier would ultimately be demolished on the grounds that it "somewhat restricts the entrance to the wharfage in Sullivan Cove." This occurred inconveniently early when in March 1948 fire destroyed 400 feet of the outer pier, the whole of the largest shed on the waterfront, and 50,000 cases of apples awaiting export, while a further 250 feet of pier was badly damaged. King's Pier was under reconstruction and unavailable for use so the development scheme was modified to provide replacement accommodation as soon as possible. Macquarie No. 4 wharf and shed (Figure 11.6) were built in timber between 1950 and 1953, with postwar shortages delaying completion. The first permanent stage in this major scheme became un fait accompli during 1958 with the completion of the concrete 700-foot Macquarie No. 2 Wharf and its 475 x 150-foot shed covering more than an acre and a half without internal supports. Together with the 50-foot wharf apron and 100 feet of concrete roadway at the rear this allowed a freedom of circulation not often obtainable in wharf design. The addition of Macquarie No. 3 berth provides for 1250 feet of wharfage in a direct line. On the inshore side Macquarie No. 1 was reconstructed in pre-stressed concrete in 1959-60, work at the western end revealing masonry of the lighter jetty built circa 1820 on Hunter's Island.

Elsewhere in the port the main work of improvement during the 1950s involved the conversion of Prince's Pier into an extension of the wharf by reclamation of the small harbour between pier and foreshore, allowing substantial additions to the No. 2 shed. In 1955/56 there was strong opposition to a Bill providing for five acres' reclamation preparatory to further eastward and southward extension of Prince's Wharf beyond the old Battery Point shoreline, but the placement of filling for the proposed Sydney-Hobart ferry terminal was possible in 1959-61. Upstream on the Derwent the

completion of a tanker berth at Self's Point foreshadowed the eventual removal of oil storage from the Macquarie Point site close to the city centre and the extension of general cargo facilities in its stead. Shipping activity since the war has justified earlier planning and encouraged its gradual implementation. From 1945/46 when only 151 ships of 309,000 tons arrived from interstate and overseas -- the smallest number since 1843 -- traffic increased steadily until by the 1960s the number of arrivals approached the record totals of the 1850s. With the continuance of the steady if unspectacular growth of population in Hobart and Tasmania which has taken place for the last century, the port will probably extend its size and scope, more so because the city is gradually increasing its share of the island's people: from 25.9 percent in 1933 to 28.5 percent in 1947 and 33.1 percent in 1961.

Foreland Relationships

The nature of Hobart's ocean traffic connections and of the goods exchanged has been traced up to the mid-nineteenth century (Chapter 4). The main characteristics of their subsequent development will now be examined. No port or area ever again approached the strength of the Victorian connection in the early 1850s and no single foreign foreland has ever equalled the importance of Britain in the days of emigration, both forced and free, to VDL (Table 16.G). For several decades in the latter half of last century and the early years of this a regular shipping service was maintained with New Zealand, which therefore figured prominently in the overall pattern of trans-oceanic contact. The concentration of much of all direct New Zealand connections into this period is suggested by the importance of the selected dates 1872 and 1892 in Figure 16.15. Norfolk Island, Nauru and Ocean Island together account for the intermittent presence of the Pacific foreland, while the unusually strong position of 'Other' areas in 1872 is due to considerable activity in the Southern Ocean at that time, in addition to more regular movement of wines and sugar from Mauritius. Direct shipments of petroleum and

Table 16.C

Previous Port of Call of Ships Arriving at Hobart 1872-1961

Year	Australia (percent)					Beyond Australia (Percent)					
	Vic.	N.S.W.	S.A.	Tas.	Aust.	G.B.	N.Z.	Asia	Pacific	Americas	Other
1872	32.4	28.7	3.6	-	65.2	3.6	14.9	-	-	0.5	15.9
1892	20.2	39.6	5.3	-	65.1	14.1	20.5	-	0.4	-	-
1908	29.2	22.6	6.8	0.8	60.8	14.0	15.3	-	-	3.2	6.8
1918/19	44.1	33.1	14.1	0.4	93.2	3.8	1.9	-	-	0.8	0.4
1938/39	31.1	37.9	12.4	4.1	89.9	1.4	0.5	5.5	1.1	0.5	1.0
1944/45	36.2	24.6	19.6	8.6	92.6	0.6	0.6	0.6	-	4.3	6.1
1960/61	22.0	30.9	20.6	12.1	92.0	0.2	4.6	0.8	1.7	0.2	0.6

Source: Reports of Ships' Arrivals

aviation fuel from North American ports significantly increased the frequency of that foreland's connection during 1944/45. The South African connection was equally strong in that year, reflecting the diversion of traffic from the Suez route in time of war.

Within Australia the States of N.S.W. and Victoria, especially their port-capitals, have accounted for upwards of half Hobart's shipping connections at almost every stage of the port's evolution. Since the 1850s contact with the N.S.W. ports appears to have been stronger in economically prosperous periods, whereas depressed or difficult periods (including war time) have seen relative strengthening of the shorter Victorian connection. Certainly in war years the dominance of Australian connections becomes overwhelming, for obvious reasons. In Figure 16.15 the inclusion of the very heavy traffic year 1854 gives Victoria an added emphasis which the inclusion of all years would somewhat reduce. Other interstate contacts had little significance in the total pattern before this century, since when South Australia has steadily consolidated its position, owing largely to the shipment of zinc concentrates from Port Pirie for treatment at Risdon. Since the war N.S.W. had recovered its leading role of several past periods, although the Victorian link remained strong and Britton has shown that the Tasmanian foreland is of leading significance for the port of Melbourne (14). In 1960/61 the Queensland traffic represented 5.4 percent of the total, the highest for any representative year.

The supporting evidence of port of registry data reinforces the general characteristics of the previous port pattern. The predominance of Australian ships throughout the whole period after the 1840s (Table 16.H) is not surprising though British vessels maintained a continuing importance, falling badly only in the two war years and in the depressed period represented by 1872. In the last few decades, in fact, British ships reaching the Derwent have been a larger proportion of total arrivals than for a century past. The large share of Australian and total registrations accounted for by Melbourne and Hobart is illustrated in Figure 16.16, while London

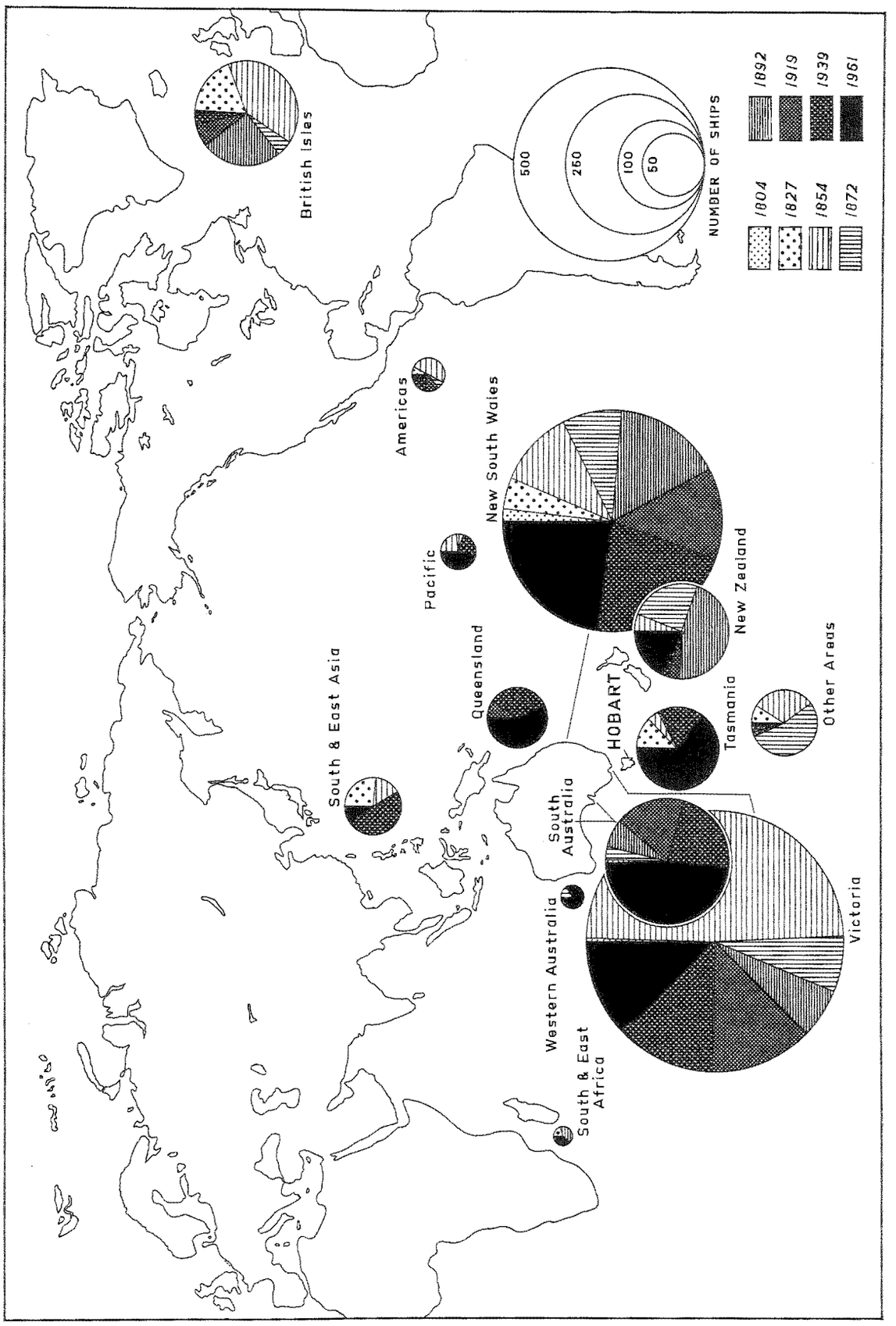

Fig. 16.15 Previous ports of call of interstate and oversea ships arriving at Hobart, for representative years 1804-1961 (Reports of Ships' Arrivals, State Archives).

Table 16.H

Port of Registry of Ships Arriving at Hobart 1872-1961 (by area percentage)

Year	Aust.	N.Z.	G.B.	Scan-dinavia	W & S Europe	Asia	Americas	Other Areas
1872	86.2	1.5	5.1	3.1	1.5	-	5.1	0.5
1892	49.4	30.4	19.9	-	0.4	-	-	-
1908	35.4	28.4	18.2	3.1	15.0	-	-	-
1918/19	71.2	17.4	10.2	-	-	0.8	0.4	-
1938/39	48.2	13.8	32.3	1.7	1.9	2.2	-	-
1944/45	52.6	15.6	6.9	11.0	-	-	13.3	0.6
1960/61	60.2	3.1	23.9	6.3	4.2	1.3	0.8	-

Source: Reports of Ships' Arrivals

clearly leads the other ports of the world whose ships trade with Hobart. Of other extra-Australian areas only New Zealand has consistently provided a substantial proportion of total registrations, mainly from Dunedin in the decades around the turn of the century. At that period the "horseshoe run" was regularly operated: Hobart-Melbourne (or reverse) - Dunedin-Bluff-Hobart. Subsequently, wartime interruptions, ageing ships, and the prohibition of non-Australian ships from coastal trading have reduced the contribution of N.Z. ships to Hobart's traffic, although the 1960/61 figure shown is unusually low. Sydney and Melbourne now provide most of the trans-Tasman contacts.

In the seven representative years of Table 16.H, together with 1827, 1835 and 1854, some 3,000 interstate and oversea ships entered the port of Hobart; 58 percent of them were registered in Australian ports, just over half in Hobart itself. Melbourne accounted for 21 percent of the total, just one percent less than the entire registrations from British (including Irish) ports, notably London, Liverpool and Glasgow. One interesting departure from usual practice was the arrival in 1908 of 54 French vessels (14 percent of the annual total) following the grant of a home government mileage

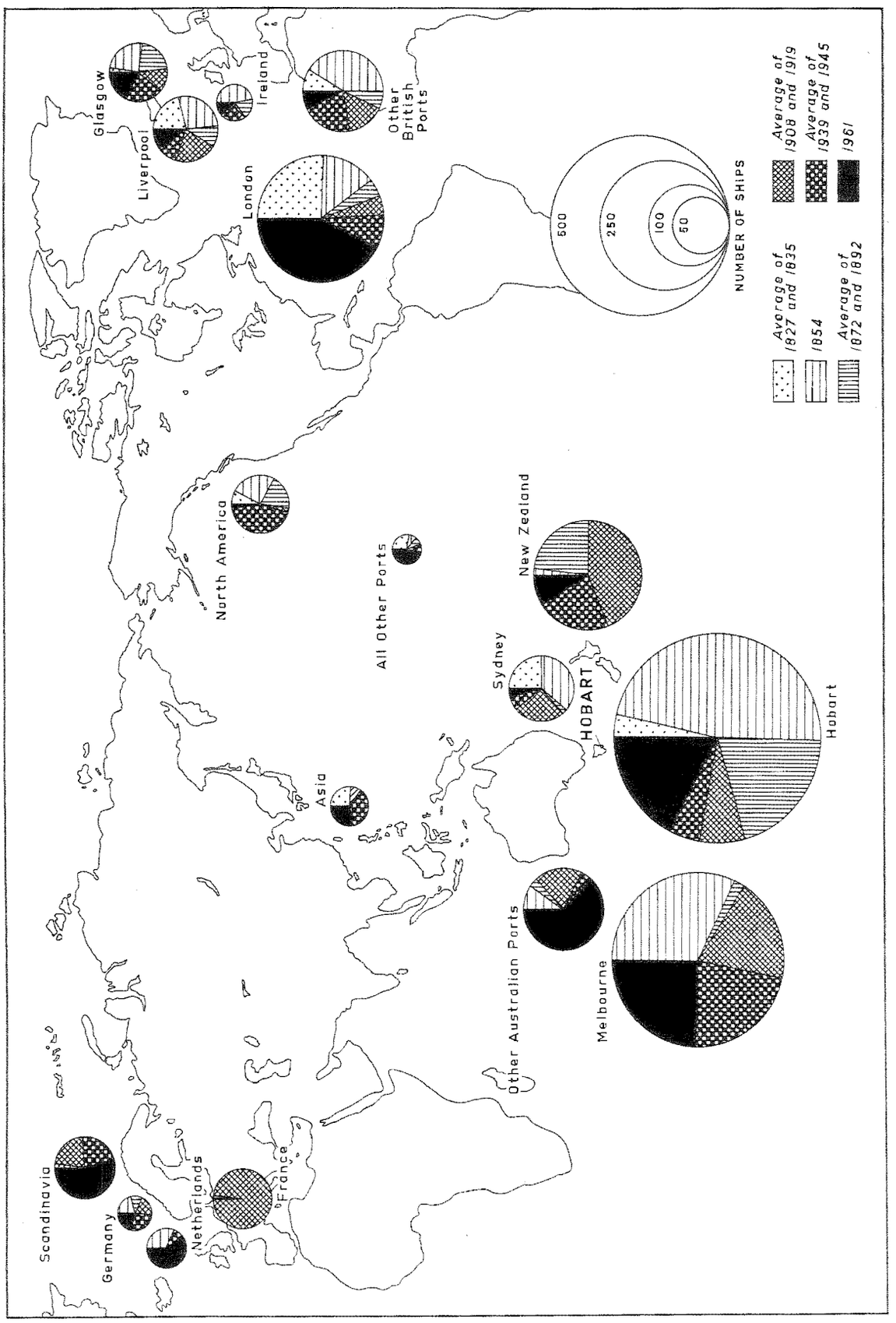

Fig. 16.16 Ports of registry of ships arriving at Hobart in selected years 1827-1961. The strong British element among ships registered outside Australia is noteworthy. (Reports of Ships' Arrivals, State Archives)

subsidy for sailing ships to enable them to compete with steamers in search of cargoes in distant places -- and where better than Hobart?

Inward Commodity Movement

The most notable feature of Figure 16.17 is the strong position of general cargo. This evidence, quantitatively unrefined as it is, but supported by the course of the port's structural development, shows clearly that Hobart has always been a general cargo port. It has for limited periods also functioned as a passenger port, but that has served to reinforce the accent on general as distinct from bulk cargoes, since there has long been a natural association of general cargo with passenger ships. Because a number of the categories in Figure 16.17 are partly or even substantially composed of goods now regarded as general cargo (particularly group 3), the dominance of this type is very marked; more so if the passenger element is separated from the goods section. Thus, the least proportion of all goods in groups 2 to 10 inclusive which groups 2 and 3 in combination represented, was 48 percent in 1872, with the average for all ten years of the graph being 61 percent (Appendix XXXV). The recent position based on more detailed data confirms this situation.

Few associations of particular commodities and forelands have persisted throughout the changing demands and allegiances of a growing port hinterland. The leading commodity-origin associations shown in Table 16.I re-emphasise the strong Victorian and N.S.W. maritime connections indicated by the evidence of ship movements. The flow of sheep and cattle from southern N.S.W. in the 1830s was surpassed by those from Victoria for the next few decades, but in 1892 there were still regular shipments of livestock, coal and general cargo coming from Sydney via Eden. The very early connection with Mauritius continued until the 1880s and has revived of late with small exports of fruit to the island from Hobart. The outstanding flow of passengers and general cargo between Melbourne and Hobart in the 1850s persisted much longer than the gold rush, and only ever

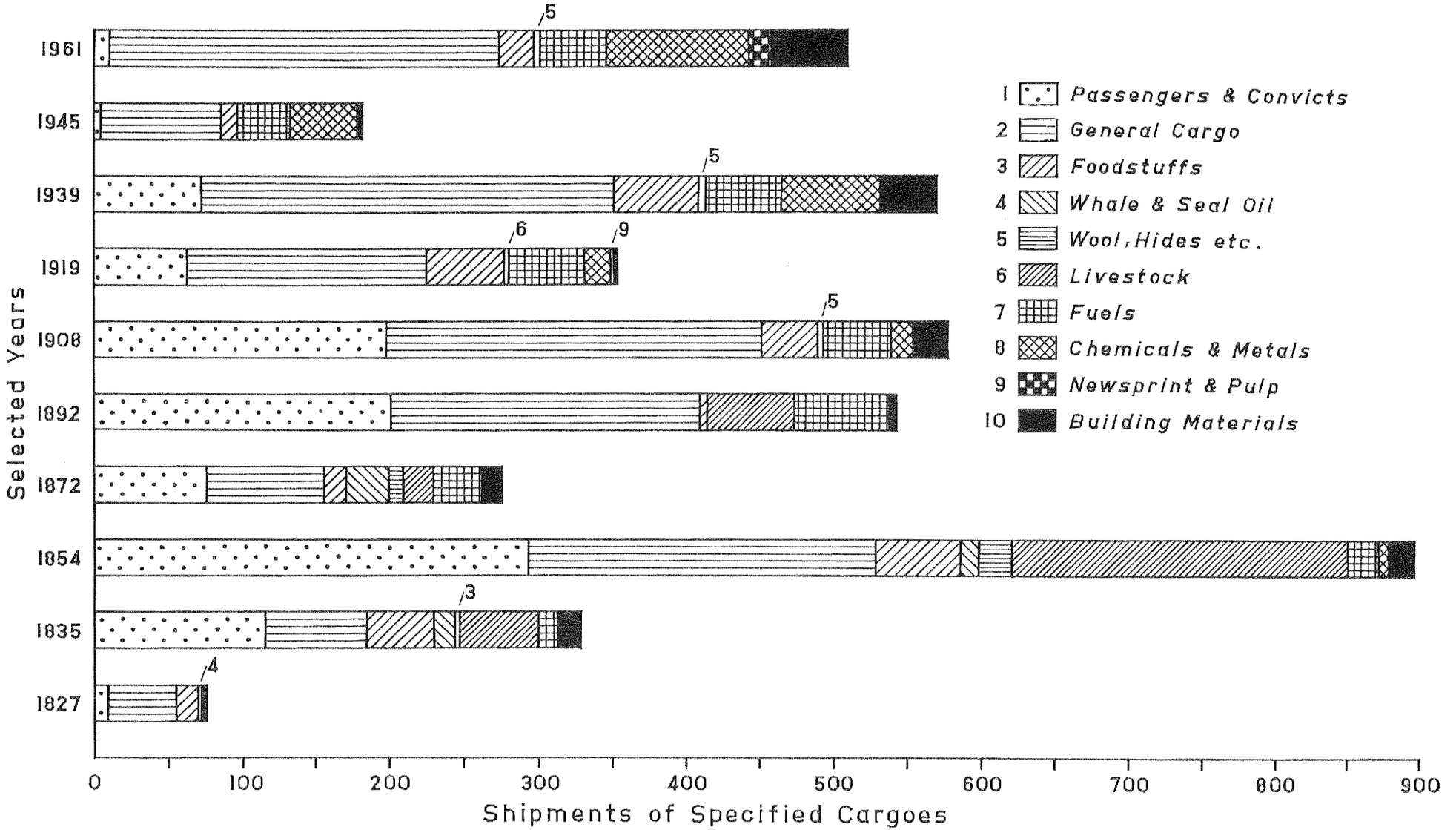

Fig. 16.17 Composition of inward commodities 1827-1961 (Reports of Ships' Arrivals, State Archives).

Table 16.I

Commodity-Origin Rankings of Inward Cargoes
1861-1961

Year	Rank by Percentage of Total Unit Shipments							
	1st		2nd		3rd		4th	
1861	Gen. Cargo - Victoria	17	Sheep - Victoria	15	Passengers - Victoria	13	Cattle - Victoria	12
1872	Gen. Cargo - Melbourne	15	Passengers - Melbourne	12	Coal - Newcastle	11	Passengers - Sydney	9
1884	Gen. Cargo - Melbourne	17	Passengers - Melbourne	14	Coal - N.S.W.	11	Passengers - Sydney	8
1892	Passengers - Sydney	16	Gen. Cargo - Sydney	14	Coal - N.S.W.	10	Gen. Cargo - Melbourne	9
1908	Gen. Cargo - Melbourne	13	Gen. Cargo - Sydney	12	Passengers - Sydney	11	Passengers - Melbourne	8
1918/19	Gen. Cargo - Melbourne	18	Gen. Cargo - N.S.W.	15	Passengers - Sydney	8	Coal - N.S.W.	8
1927/28	Gen. Cargo - Sydney	29	Gen. Cargo - Melbourne	20	Passengers - Sydney	11	Coal - N.S.W.	10
1938/39	Gen. Cargo - N.S.W.	21	Gen. Cargo - Melbourne	18	Passengers - Sydney	11	Steel - N.S.W.	5
1960/61	Gen. Cargo - N.S.W.	18	Gen. Cargo - Victoria	14	Concentrates - Pt. Pirie	10	Steel - N.S.W.	7

Source: Records of Ships entered in and cleared out at Hobart Town 1824-30 and Reports of Ships' Arrivals

lost rank to the similar traffic with Sydney. By the 1870s the movement of coal from Newcastle and then from Sydney had become significant (the city's gasworks were in operation), and by World War II steel was coming from the same direction.

Several shipments of fertilisers from Melbourne in 1908 related to agricultural advancement prior to local production of superphosphate by the Electrolytic Zinc Co. At the same time wheat movement from South Australia and Victoria was becoming substantial, involving 28 shipments in 1908 and 40 in 1918/19, but then declining until post-World War II and the fillip to the traffic provided by the installation of silos and bulk-handling facilities near Prince's Wharf. In 1918/19 the shipping of ore from Port Pirie to Risdon had become a new feature of commodity structure, followed later by a regular flow of concentrates which rose to 255,000 tons in more

than 60 shipments in 1960/61. The coal movement has a longer history, reaching a peak frequency in 1892, when 62 shipments came from N.S.W. alone, then declining to 37 in 1918/19, 19 in 1944/45 and 9 in 1960/61.

Export-Import Structure

The first total cargo tonnages consistently available for the port of Hobart date from 1916.[16] The general increase in volume of goods traded over the next 45 years (Table 16.J) paralleled shipping traffic, including periods of recession which exceeded the usual degree of annual fluctuation: 1916 to 1919; from a record 708,543 tons in 1927/28 to 574,406 tons in 1930/31; and from a new record 805,939 tons in 1938/39 to 685,837 tons in 1941/42. Otherwise, the steady growth of Hobart's consumer population, the

Table 16.J

Volume of Imports and Exports 1916-1960

Year	Tonnage ('000)			Year	Tonnage ('000)		
	Inward	Outward	Total		Inward	Outward	Total
1916	164	180	344	1939/40	430	347	778
1919	114	127	241	1944/45	391	318	709
1924/25	325	286	611	1949/50	554	320	874
1929/30	328	343	671	1954/55	661	435	1,096
1934/35	324	357	681	1959/60	740	535	1,275

Source: Statistics of Tasmania and Marine Board of Hobart: Annual Report

increasing production of the few major manufactures (zinc, confectionery, fruit and jam, paper) and of the pome fruit industry brought progressive increases in both imports and exports, until in 1951/52 one million tons of cargo were handled at Sullivan Cove and its outport berths. The imbalance of exports and imports is a post-World War II phenomenon. Prior to 1939/40 the discrepancy

16 Details for individual commodities are recorded in the parliamentary papers for 1858-79, but many quantity units are used which are not convertible to total figures

between the two was rarely more than a few percent of total cargo and until the mid-1930s exports usually exceeded imports. From 1935/36 the gap widened in favour of imports, with as little as 36 or 37 percent of total cargo in exports in 1946/47, 1948/49 and 1952/53.

The composition of imports for 1927/28 representing the pre-depression interwar period is shown in Table 16.K with the extent of subsequent increase by face and corrected values (cf. Table 11.E).

Table 16.K

Structure of Major Imports 1927/28 and 1960/61

(with increase for 1927/28-1960/61)

Commodity	Value* (£'000) 1927/28	Value (£'000) 1960/61	Increase 1927/28-1960/61 (percent)	Real Increase (percent)**
Food, drink, tobacco	1,327	11,384	758	187
Clothing, textiles	660	1,848	180	44
Glass, china	31	272	785	194
Motor Vehicles	95	2,161	2,175	537
Petrol	115	1,140	895	221
Other oils	50	934	1,774	438
Paper, pulp	149	2,339	1,472	363
Machinery	254	5,227	1,956	483
Iron sheet	20	918	4,442	1,097
Tinned plate	61	433	613	151
Wire	14	394	2,740	677
Pipes	15	329	2,108	520
Fertilisers	67	293	336	83
Other Chemicals	101	1,051	938	232
Ores & concentrates	627	3,433	447	110
Total all imports	4,667	39,087	737	182

* Comparative quantity data are only available for some commodities. Indicative of the magnitude of increases are: petrol 2.6 to 19.1 mill. galls., iron sheet 992 to 14,770 tons, fertilisers 18,989 to 85,355 tons, and concentrates 114,929 to 254,590 tons.

** The Reserve Bank of Australia's Import Price Index is used. Taking 1928/29 as base 100, the 1960/61 index for all import commodities is 405. This is applied to each commodity increase.

Source: Marine Board of Hobart: Annual Reports

Major exports for 1927/28 were similar to those of more recent years, and their structure in Table 16.L may be compared with that

of Table 11.F.

Table 16.L

Structure of Major Exports 1927/28

Commodity	Value (£'000)	Increase 1927/28-1960/61 (percent)	Quantity	Change 1927/28-1960/61 (percent)
Food, drink	2,245	543	--	?
Fresh fruit	922	389	157,600 tons	12
Processed fruit	356	302	7,624 "	41
Jams	322	59	5,132 "	-43
Wool	544	422	c. 2,686 "	82
Zinc	1,581	564	55,581 "	94
Carbide	67	?	3,320 "	c. 0
Timber	152	364	c.12 mill.s.ft.	-11
Total all exports	5,433	692	381,841 tons	47

Source: Marine Board of Hobart: Annual Reports

The outstanding importance of edible products (the balance between the components of the food and drink group and the total being mainly confectionery) and zinc metal is very clear.

Defence Provisions: Port City

The question of defence may seem little related to port functions, but consideration of Hobart's external security from time to time was invariably concerned with the city's exposure to attack from the sea. Planning took the form of providing sufficient batteries around and below the town to withstand the fire-power of any marauding vessel of a foreign power which was disposed to sail up the Derwent with belligerent design. Although this matter has not been exhaustively investigated it is clear that thinking often related to the possible depredations of a foreign vessel, not whole enemy navies. Doubtless the governing body was realistic enough to see the unlikelihood, despite the consistently eulogised capacity of Hobart's harbour, of any European opponent committing extensive forces to the subjugation of the Australian settlements.

However, following an Intercolonial Conference on the withdrawal

of British troops from the Australian Colonies it was argued by Governor Du Cane and his advisers that Hobart was admirably adapted for being the Headquarters Station of the Australian Command by virtue of its unsurpassed port, and Government buildings better equipped for the reception and custody of warlike stores and munitions than those of any other colony (15). It was observed at this time, 1871, that

> "The position of the Capital and seat of Government of Tasmania, in which is naturally aggregated the largest amount of valuable buildings and moveable wealth, can only be regarded as absolutely defenceless from attack by sea"[17]

In 1854 actual and proposed defensive works were exclusively associated with the headlands on either side of the port (Appendix XXXVI) with a second battery to overlook the Prince of Wales' installation on Battery Point (Appendix XXXVII), balanced by the proposed Queen's Battery on Macquarie Point. With the threatened removal of the British-made umbrella in 1871 and the recognition of the city's vulnerability, it was decided to establish a battery downstream of Sandy Bay at One Tree Point, and at the same time to strengthen the Queen's Battery. A second new bastion of defence was proposed for Kangaroo Point (Figure 16.18), giving 2,000 yards-radius crossfire which would cover the Derwent. In 1880 following the Russian war scare of 1878 it was reported that the Alexandra Battery on One Tree Point, to carry 7" guns, was being substantially constructed in good materials and at less cost than Queen's Battery.[18] The eastern installation on Kangaroo Point was eventually provided, but like the remaining components of the defence system had never to fire a shot in anger. In more recent times the transformation of naval flexibility and capacity, and then the revolution in global defence strategy associated with aerial warfare which has even shaken Mackinder's far-sighted concepts (16), has left Hobart's nineteenth-century batteries in various states between decay and preservation (Figure 16.20). The (tacit) realisation that Tasmania is unlikely

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17 House of Assembly Journals, 1871, Vol. 22, Report No. 31

18 Legislative Council Papers and Journals, 1880, Vol. 29, Report No. 59

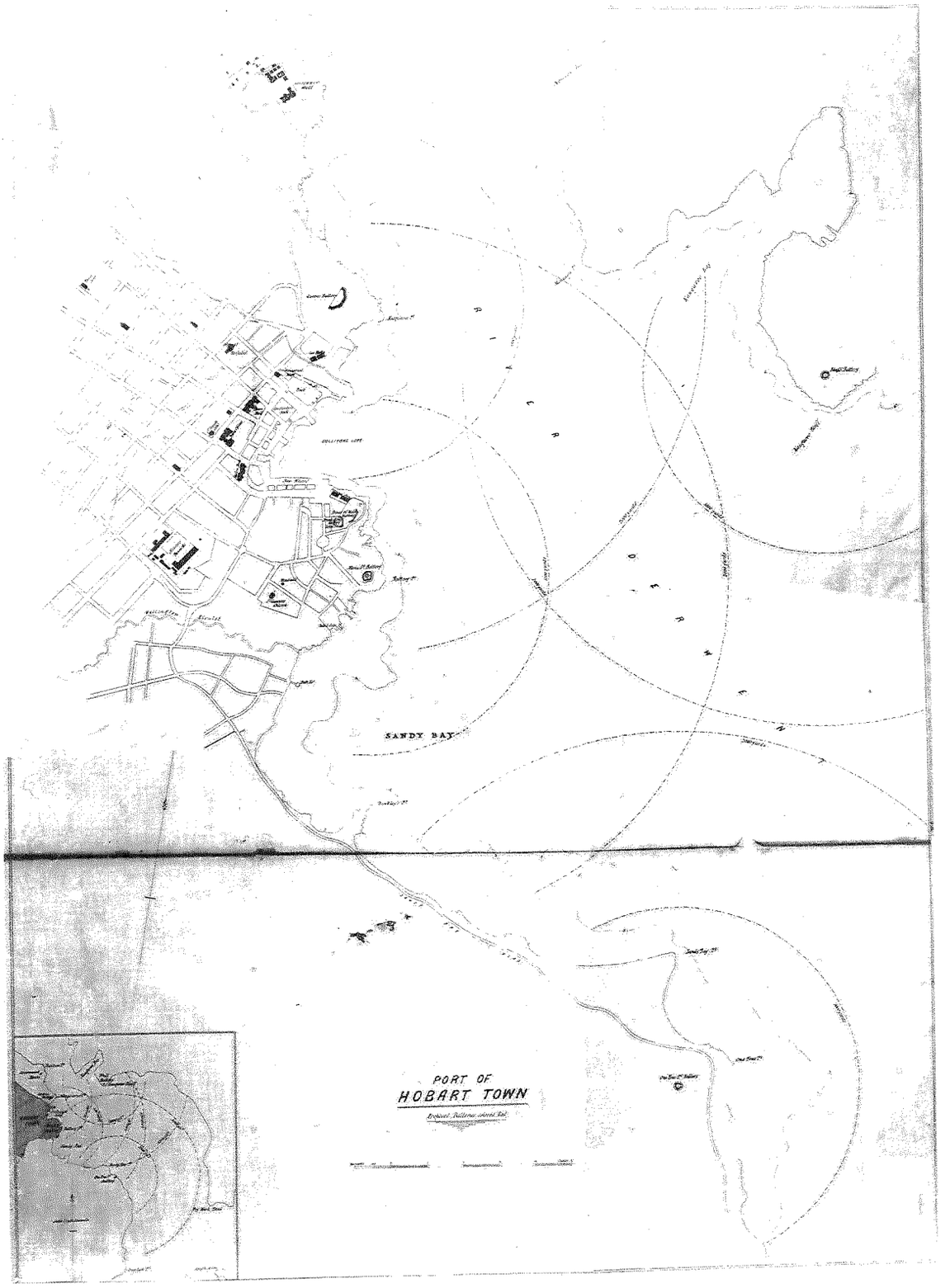

Fig. 16.18 Batteries proposed for Hobart's defence, c. 1868. By 1880 the One Tree Point battery in the south was under construction, that on Kangaroo Bluff in the northeast was to follow. (The shoreline follows Brooker's chart of 1861. (MPG 809, Public Record Office)

to be a first line of defence in modern international conflict leaves the role of the Hobart port-city a decidedly peaceful one, while the same locational relationships ensure that not all deep and commodious harbours can achieve the distinction of serving as world port-cities.

Fig. 16.19 Commanding defensive overview of city and harbour from the slopes of Knocklofty, 1890 (Tasmanian Museum collection)

Fig. 1.2? One of the stone implements and old guns of the Black Battery (Bellerive) during the Derwent reach, 1960.

References Chapter 16

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Chapter 17

The Spatial Shift of Inner Values

The increased concentration of property values in a few central blocks of the city has already been observed in the comparison of block valuation totals over the century 1847-1954. The disposition of property at an intermediate period should indicate a developing tendency in the same direction if the phenomenon is to be regarded as a progressive and perhaps inevitable process of urban growth and development.

The most appropriate date was considered to be 1901, but for reasons stated in the previous chapters this intermediate point stood between two half centuries of contrasting rates of change. Even though the twentieth century provided one depression and two wars of world scale the urban entity showed better powers of recovery in population, areal extension, and trade than following the first major check to expansion in the 1860s, if only through the better capacity of the larger organism to sustain basically economic body blows. This meant, however, that changes before 1901 tended to be more subdued than those after that date, although how much the situation owed to differential rates of growth and how much to absolute size and possible threshold levels might be better answered if more closely comparable studies become available.

Individual valuations in 1901 were of the same money order as those of 1847, though additional improvements to property within the colonial area brought the total assessment to ₧166,000 compared with the original ₧101,000. The absolute range of block average valuations was slightly narrower in 1901 than in 1847 and 1954, and the 3rd and 4th quintile values were actually lower than their 1847 counterparts (Table 17.A).

The most significant aspects of a century's change in property values revealed by a comparison of Figure 17.1 with Figures 2.4 and 12.2 are three:

Fig. 17.1 Distribution of block average property valuations 1901, in four categories. Values in pounds. (Assessment Roll, 1901)

Table 17.A

Ranking of Inner Area Property Values 1847-1954

Quintile	1847		1901		1954	
	Value(£)	Index	Value(£)	Index	Value(£)	Index
1st	16.25	100	20.30	100	57.10	100
2nd	21.65	133	23.75	117	71.30	125
3rd	32.45	199	29.80	147	116.16	203
4th	52.35	323	46.50	229	224.40	427
Range (£)	8.8 - 262.5		13.6 - 191.7		39.9 - 2838.7	
Total Valuation (£)	101,274		165,769		837,269	

Source: Assessment Lists 1847 (1), Assessment Roll 1901 (2), Assessment Roll 1954/55 (3)

1. There has been a spatial shift in highest average values
2. The highest averages progressively coincide with the highest block totals
3. Shifts have occurred through smaller distances among the leading block total valuations.

The Distribution of Average Values

In 1901 the highest average values were clearly moving away from the port-side toward the commercial core. The reduced money values of the upper range meant that only two blocks in the Macquarie-Bathurst/Argyle-Harrington area rated above £100 (the 1847 categories having been retained). The more objective assessment of decile ranking (Appendix XXXVIII), shows that none of the nine blocks in this core section ranked lower than the 9th decile. Blocks in the 10th decile outside those contiguous with the main block were Blocks 48, 71, 109, 117 and 118. The last three were all small blocks closely adjacent to the new port developments of the western shore, and the first two adjoined more heavily commercial central blocks and counted a number of offices among their functions.

The areal distribution of change in rank value between 1847 and 1901 is shown in Figure 17.2. Several blocks fronting Liverpool

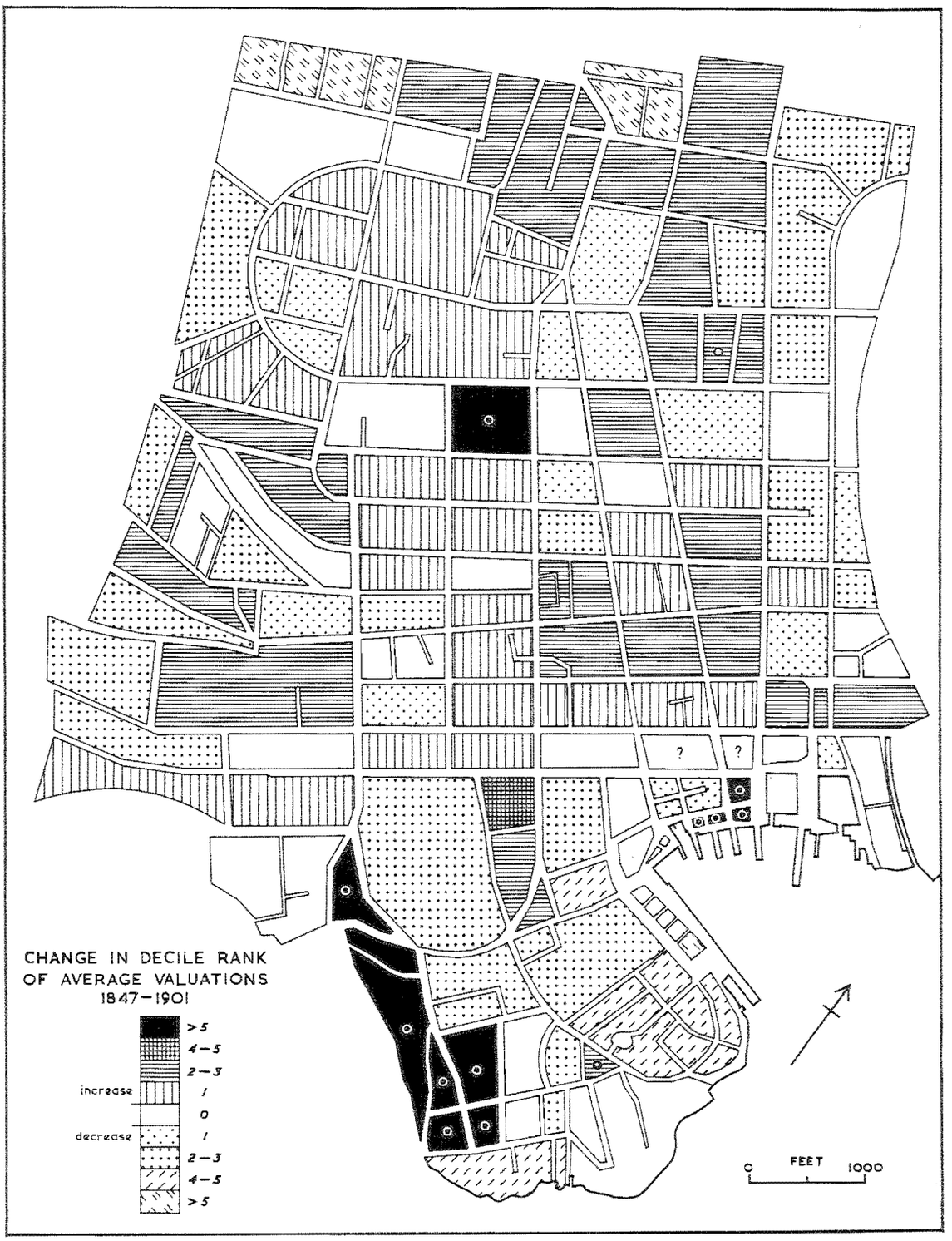

Fig. 17.2 Change in decile rank of block average property valuations, 1847-1901. Blocks with 'o' inset carried no valuation in 1847 (Assessment Lists 1847, Roll 1901).

and Elizabeth Streets in the commercial core increased rank by at least two deciles, including the main block of greatest property concentration at both dates (Block 85). Two other series of blocks, one in North Hobart and the other in West Hobart made increases of the same order. They owed their upgrading to more extensive occupation by higher valued properties than the scattering of mainly small houses of the first assessment, though intermingled or adjacent in both areas were blocks of not notably different composition which exhibited decline in rank by similar amounts. The most likely explanation lies in the influence of site elevation: in West Hobart Blocks 7, 13 and 31 overlook Blocks 10, 11 and 12 along the trough followed by Upper Goulburn Street (see index Figure 2.5), and Block 14 looks out over South Hobart from the Forest Road ridge. The large Block 18 then seems anomalous, since its location is between Macquarie Street and the Hobart Rivulet, but here the explanation of increased average value lies in the acquisition of manufacturing functions. In North Hobart Blocks 91 and 93 particularly are on the steep western slope of Trinity Hill while Blocks 79 and 80 across Elizabeth Street fall away toward Murray Street. By the same token, Blocks 26 and 40 largely overlook Blocks 28 and 41 although these also improved rank during the period. Overall, it is clear that all but a few blocks in the substantial central area bounded by Davey, Brisbane, Molle and Argyle Streets were upgraded in their property holdings during 1847-1901, while the bulk of Battery Point and all the area east of Argyle and north of Collins Streets failed to increase rank. The southwestern edge of Battery Point lacked valuation in 1847 and had inevitably to gain by inclusion in the 1901 universe, but the heavily residential Blocks 22 and 38 (diagonally opposite each other across the Davey-Molle Street intersection near the Barracks) were both in the 9th decile.

Between 1901 and 1954 there was little scope for the already top-ranking core blocks to increase their standing and so a tract of no-change appears in Figure 17.3. However, a general pattern of increase occurred in the blocks around the northern fringe of the

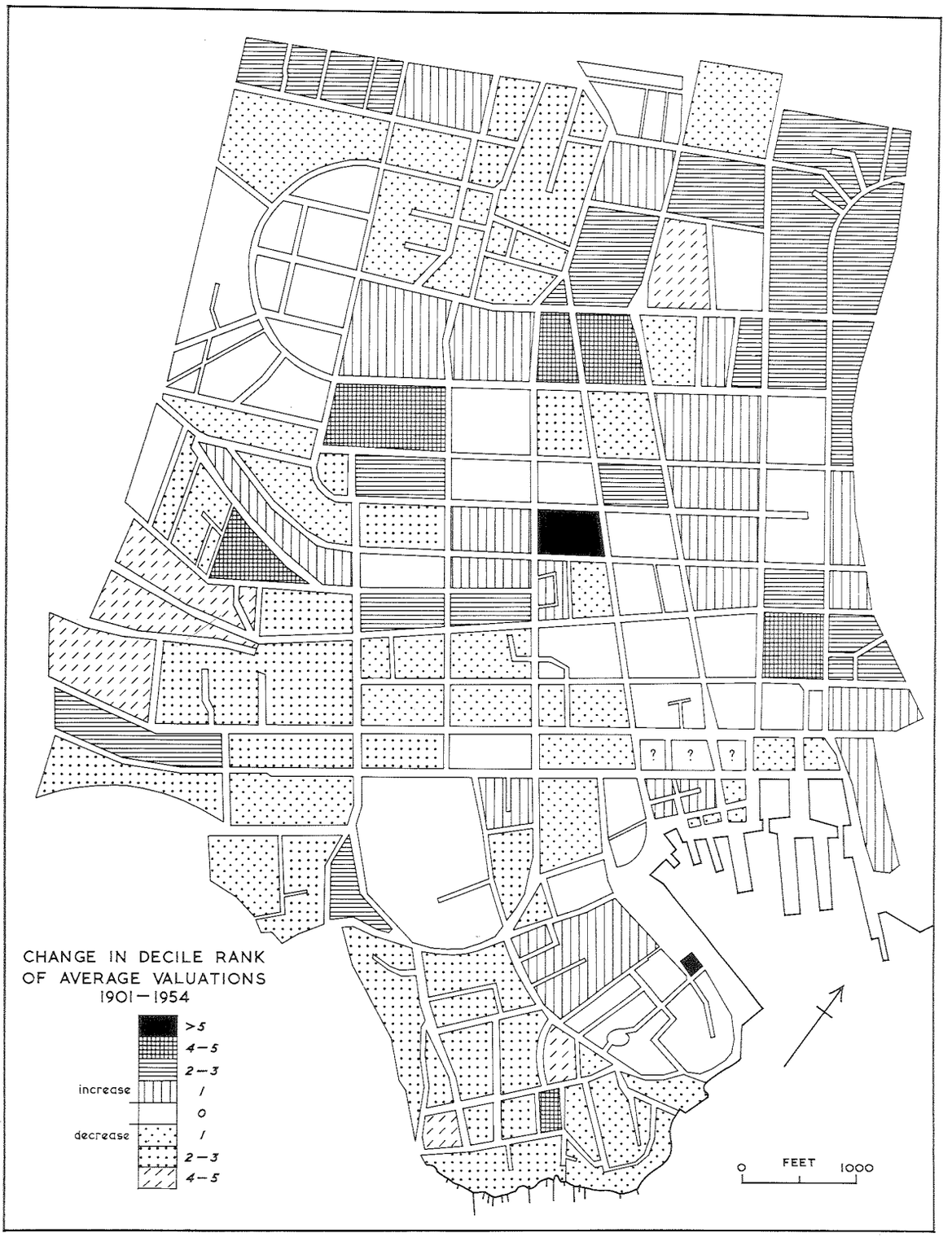

Fig. 17.3 Change in decile rank of block average property valuations, 1901-1954 (Assessment Rolls 1901, 1954/55).

core, indicating the expansion of central business functions in that direction. This was particularly associated with Elizabeth Street, although Block 67 received an extra boost from manufacturing acquisition. The two southern quarters, on the other hand, showed little evidence of increasing rank. Over the whole inner city decreasing rank was general to the areas of the western and southern perimeter while most of those to the east and north either maintained or improved their standing over 1901 values. In other words business functions were expanding northward and to a lesser degree westward of the initial zone of concentration, associated largely with lower-lying land between the Domain and the steeper parts of West Hobart on the flanks of Knocklofty. The composite of the two periods of change (Figure 17.4) bears out this general position. Elizabeth Street is the main axis of change with several 'parallel' and cross-streets from Harrington to Campbell and from Collins to Patrick each associated more with increasing than decreasing block rank. A line can be drawn around more than 20 blocks between Barrack and Park, Macquarie and Warwick Streets to show an unbroken extent of added rank over the whole evolutionary period for reasons essentially of commercial extension.

Changes in Value-Function Relationships

This is not only a matter of increased commercial content in the numerical composition of block properties. It seems clear that central retail properties increased their valuations relative to wholesale and residential functions. We know that Blocks 85, 86, 100 and 101 already of the commercial core in 1847 moved into the first rank of property from the second (by value category, lower by decile rank); that the Salamanca Place warehouse zone of Blocks 72, 74 and 53 has declined noticeably; that the original warehouse zone of Block 116 has moved into the very first rank in changing to a major manufacturing area; and that Blocks 73 and 87 have retained high valuation status along with their administrative character despite changes in the detail both of buildings and functions.

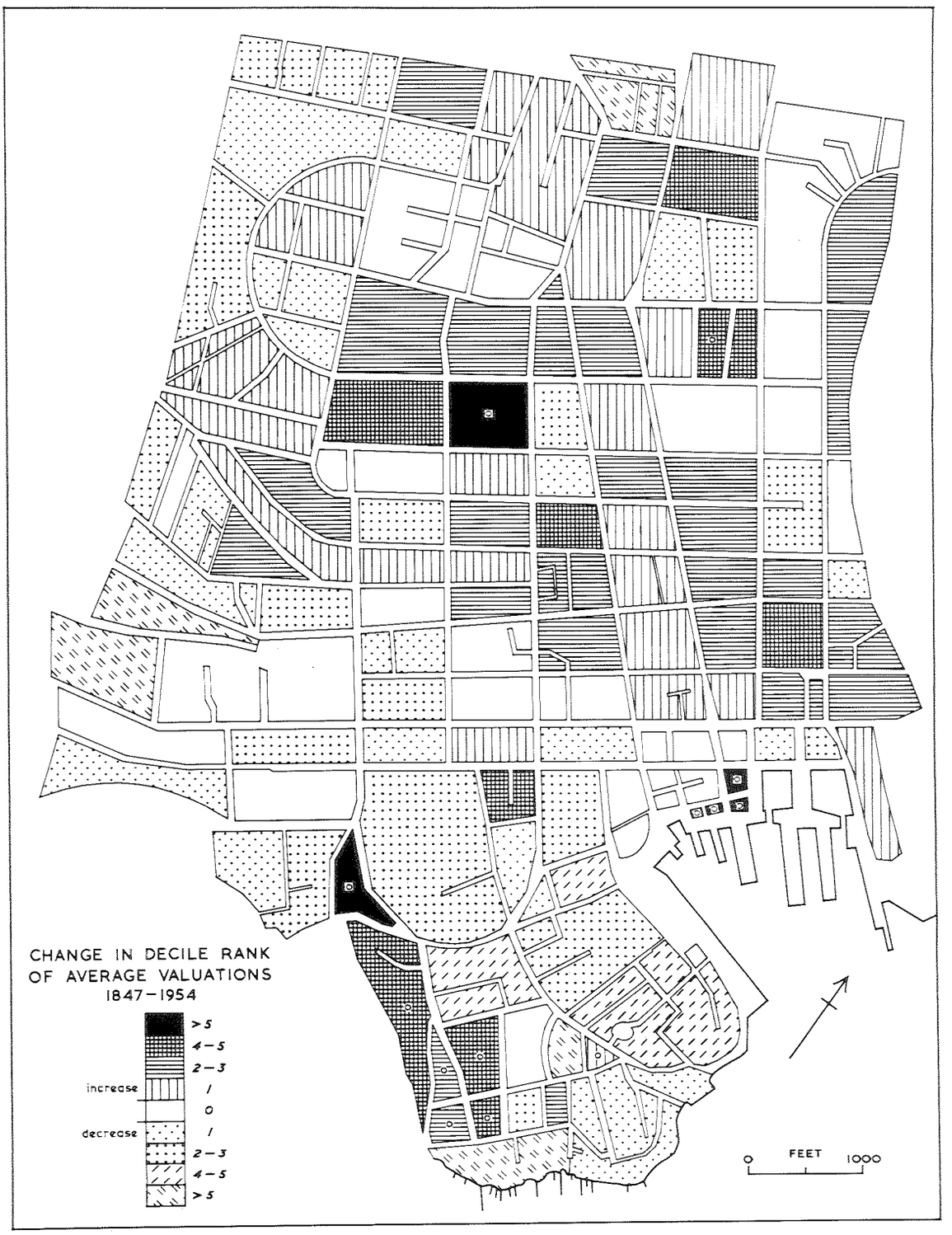

Fig. 17.4 Change in decile rank of block average property valuations, 1847-1954. Blocks with 'o' inset carried no valuation in 1847 (Assessment Lists 1847, Roll 1954/55).

The value relationships of several selected functions averaged for the whole inner area are shown in Table 17.B.

Table 17.B

Comparative Values of Selected Functions 1847-1954
(Shops 1847 = 100)

Year	Shops	Ware-Houses	Hotels	All Commerce	Factories	Public Bldgs.	Residences	All
1847	100	310	277	157	290	513	75	101
1901	121	201	358	164	174	120*	83	99
1954	633	660	4,410	964	830	1,990	198	390

* Depressed owing to the omission of several major units from the assessment.

Source: Assessment Lists 1847, Roll 1901, Roll 1954/55

Since houses increased their average valuation less than three-fold while the average shop valuation was rising to more than six times its 1847 level it is clear that the simple replacement of houses by shops, without any increase in the intensity of occupance, would increase the relative concentration of area property value. This applies in varying degrees to most other functions, whose absolute values are invariably higher than the residential value. Thus the introduction of one hotel to an urban block in 1954 was the value equivalent of adding more than 20 houses, but in 1847 or 1901 it was worth only about four residential properties. Since the indices in Table 17.B relate to the whole inner area, the relationship would be in even stronger contrast if the more valuable central businesses were not diluted by small shop units outside the commercial core.

This, however, was much more a function of the period after 1901. Shops of the inner city increased from one and a half to more than three times the average residential assessment from 1901 to 1954, but in the main block the change was from about one and a half times (shops ≒90.5, residences ≒63.3) to nearly eight times (shops ≒718.2, residences ≒90.5). The six-fold increase of the commercial (excluding offices) sector generally during 1847-1954, and by almost the whole

amount during 1901-1954 shows the trend which any process of residential replacement and commercial substitution could be expected to follow. Compared with hotels, public buildings, and shops, warehouses and factories experienced very subdued increases in face value; in fact relative to all functions their value declined. That is not surprising in Hobart's particular circumstances or even in the general conditions of urban development. The colonial warehouses were large, well-built and important structures fulfilling a most important role in the days of trade development and substantially imported foodstuffs. Perhaps if Hobart had not been a port nor had the benefit of convict labour the storage functions would have had less important beginnings. It still remained, however, for retailing to diversify its scope, proliferate its outlets, and concentrate them increasingly, not only in Hobart but in cities around the world. (The later stage of decentralising some retail functions in the wake of the earlier replaced residential elements was not illustrated by Hobart of 1954). As for manufacturing, the small size of most inner city units can be regarded as having universal application, and the main control upon increasing value during the 1847-1954 period.

Core Value Concentration

With increase in commercial occupation and with the improving value status of commercial and other non-residential functions, an upgrading of the central area's share of total property valuation could be expected as time passed. The fact that only the first of the six leading blocks had increased its share of inner area property value in 1901 almost certainly reflects the economic difficulties and slow growth of the preceding decades, but again we cannot discount entirely the possible influence of timing - whether the appropriate stage of evolution in retail structure had been reached. Clearly that evolution did not depend on population size alone, for if it did London would have produced revolutions in retail forms and methods long before the nineteenth century.

The added proportion of inner area property in the first six

Table 17.C

Concentration of Property Value in Leading Blocks 1847-1954
(as percentage of inner area total)

Block Rank	1847	1901	1954
1	5.18	6.39	7.89
2	4.44	3.68	4.85
3	3.87	3.50	4.01
4	3.24	3.14	3.80
5	3.07	3.02	3.38
6	2.83	2.43	2.44
Total	22.63	22.16	26.37

Source: Assessment Lists 1847, Roll 1901, Roll 1954/55

blocks in 1954 dispels any doubts the slight reduction of 1901 may have raised as to the trend of movement. This may seem a very modest increase in view of the greater and more selective use of central land through the period under examination, and therefore a function of Hobart's limited growth. However, other land within the inner area was being developed, often from a completely unimproved condition, and by 1954 the extent of the urban area was such that ready access to the commercial core was tenuous at best. In these circumstances any increase in concentration at the centre may be regarded as significant,[1] remembering also that only three blocks in 1954 (two in 1847 and one in 1901) contained as much as four percent of all inner area property value. Thus the six leading blocks of 1954 had added property value equivalent to the third ranking block's since 1901.

As intimated above, as the settlement developed the increase of property concentration in the core lifted the average value rank of the component blocks. It is noteworthy that the failure of property to increase its unit value during 1847-1901 did not prevent the general elevation of the central blocks by the latter date (Table 17.D).

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[1] In respect of land values, American city cores achieved their highest proportion of total urban land values circa 1910, influenced by highly centralised mass transport (4)

Table 17.D

Decile Rank of Central Blocks 1847-1954
(block average valuation)

Year	Block Number								
	68	69	70	84	85	86	99	100	101
1847	6	6	9	9	8	9	7	8	9
1901	9	9	10	10	10	10	9	10	10
1954	8	9	9	10	10	10	10	10	10

Source: Assessment Lists 1847, Roll 1901, Roll 1954/55

Only the last of the nine blocks has not been among the six leaders in total (rather than average) block values at one or more of the three dates. The six blocks bounded by Murray and Argyle, Collins and Bathurst (together with Blocks 87 and 88 to the south) provided an unbroken tract in the 10th decile, but those west of Murray Street did not quite maintain their 1901 status in 1954.

Spatial Shifts in Central Property

Movement in the areal distribution of properties and of functional groups is probably of more immediate geographic interest than changes in rank or status, but the two are closely linked as indicated earlier in this analysis. The changing location of ranked areas is one measure of the process of development. In addition to an increase in average valuation and a movement of the highest rank into the commercial centre, there was a small but significant shift in total value rankings of central Hobart blocks during 1847-1954. Whether this indicates a similar or identical movement in the CBD as usually defined is not known.

The location of total values is a real property phenomenon[2]

[2] One deficiency of this measure of property concentration could derive from the variable size of urban blocks, a matter which block average values are meant to resolve. It can be argued, nevertheless, that larger blocks not only have the opportunity of acquiring more property than smaller ones but that they tend to be more important in functional juxtaposition, variety and opportunity. Maximum intensity uses will rarely be found, one imagines, in near isolation. Public buildings but not department stores, tend to occupy small blocks. Total block value is a measure of where the property is, within the main lines of circulation, not where it might have been if the physical plan were different.

which can be examined without necessarily analysing the arrangement of functional components. It is also a more precise statement of the relative spatial emphases of central urban functions in composite than can be provided by the generalised allocation of functional labels to zones of particular character, though that may also be done.[3] In considering a central area as small as Hobart's we could not expect to find sweeping changes over considerable distances, nor even such a spread of assimilation and discard zones as Mattingly found in a city with less than twice Hobart's population (7). There is in fact little evidence of discard, but rather of changing functional emphasis in a gradually expanding core area.

In regard to the concentration of property value the starting point is the main block -- clearly first throughout the history of valuation, and the only one of six leading blocks to advance its proportion of inner property during the latter half of the nineteenth century (Table 17.C). With property valued at more than 160 percent of the next highest block concentration and with the highest proportion of its total in commercial property, Block 85 in 1954 held a unique position. Changes in position among other ranking blocks have left it in a more pivotal location than formerly, with the 2nd, 3rd, 4th and 5th rank blocks facing its four sides (compare Figures 2.4, 12.2 and 17.1). The six leading blocks remained contiguous in both 1901 and 1954, but the progressive decline in importance of those north of Liverpool Street in favour of blocks south of Collins Street had the interesting and rather puzzling effect of pulling the property focus away from the point of highest land value at the intersection of Elizabeth and Liverpool Streets. Somewhat anachronistically, it seems, that point in 1847 [4] was surrounded by the first four ranking blocks, whereas in 1901 it was the 1st, 2nd, 4th and 7th, and in 1954 the 1st, 3rd, 5th and 7th. By the

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[3] As in Robinson (5) and Ward (6)

[4] When it may or may not have been the peak land value intersection -- it should have been, in the light of functional distribution and implied competition for land.

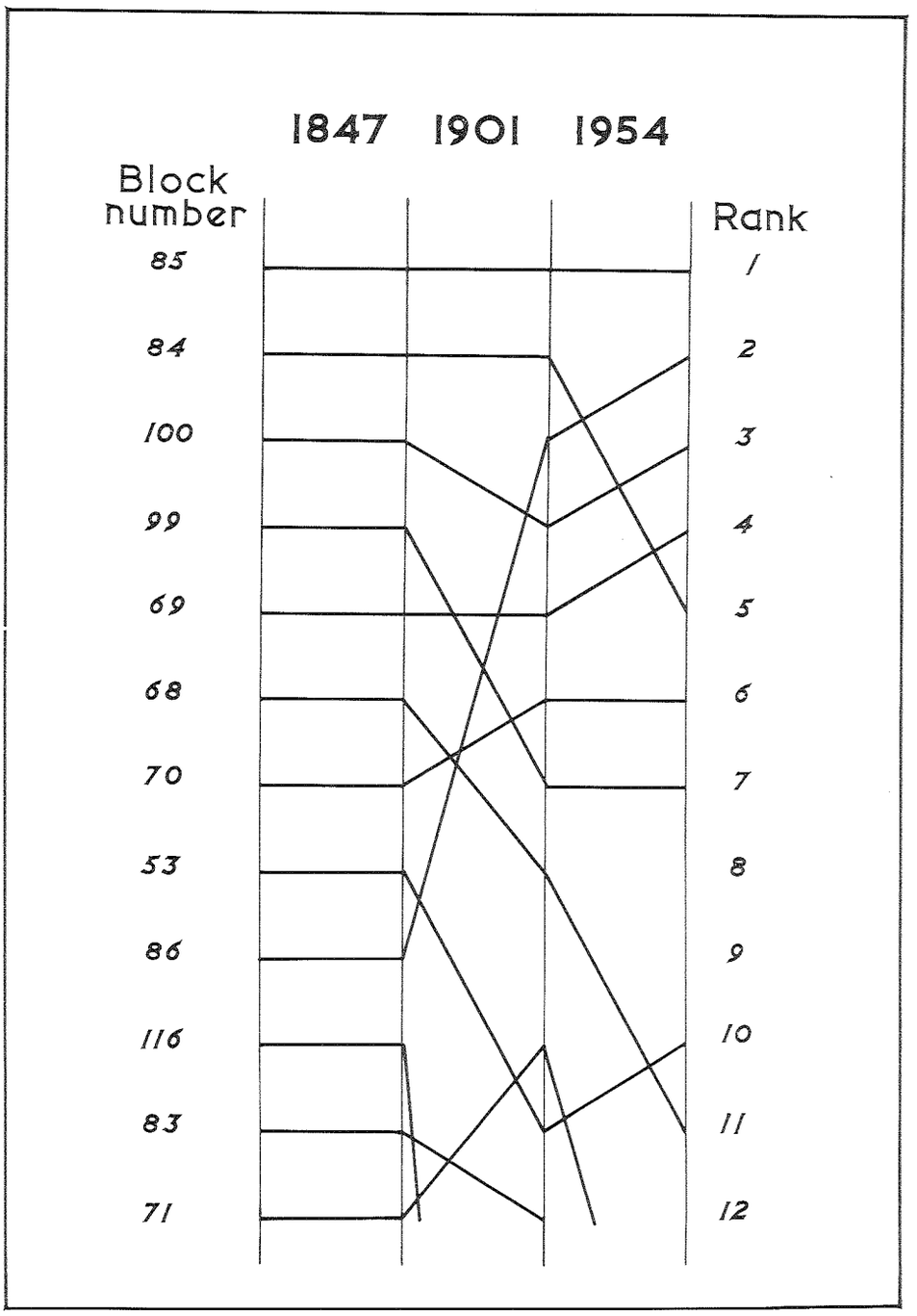

Fig. 17.5 Change in rank of the twelve most valuable urban blocks 1847-1901-1954. In 1954 the 8th, 9th and 12th ranks were occupied by three blocks which were not among the leading dozen at the first valuation: Blocks 101, 88, 108. (Assessment Lists 1847, Rolls 1901,1954/55)

last date the Elizabeth-Collins intersection lay among the 1st, 2nd, 3rd and 8th highest block concentrations of property value, thereby having clearly usurped the title of property value focus.

Changes in rank of the first 12 blocks of the 1847 assessment are shown diagramatically in Figure 17.5. Ten were continuous (only the warehouse Blocks 53 and 116 were not) and eight of the first nine lay within the 3 block x 3 block core bounded by Bathurst, Macquarie, Argyle and Harrington Streets. By 1901 Block 101 on the 14th rank was still the only one in this compact area which did not fall within the first dozen, but by 1954 Block 101 had reached 8th rank while Block 68 in the diagonally opposite corner of this central square had fallen to 11th position. The changing areal emphasis from north to south of the Liverpool-Collins 'ridge' of property value concentration is quantified in Table 17.E. The

Table 17.E

Spatial Shift of Central Property Concentration 1847-1954
(by percentage of inner area values)

Blocks	Bordering Streets	1847	1901	1954	Percentage Change 1847-1954
68,84,99	Bathurst & Liverpool	10.47	8.33	7.67	-26.7
69,85,100	Liverpool & Collins	12.11	12.55	15.69	+29.6
70,86,101	Collins & Macquarie	7.08	7.38	9.61	+35.7

Source: Assessment Lists 1847, Roll 1901, Roll 1954/55

degree of change is undoubtedly significant: although the three Bathurst-Liverpool blocks lost less than three percent of inner area value this was no less than 26.7 percent of their 1847 total and equivalent to the value of property in one ranking central block. The increase of the next two rows south is even more notable, added to which Block 108 adjoining the Collins-Macquarie row of the Table had moved to 12th rank by 1954, and Block 88 further south beyond the open space and public buildings of Block 87 held the 9th rank. In terms of rank totals (with lowest total representing highest rank

combination) the northern row moved from 12 to 17 to 23 through 1847-1901-1954, while the middle row changed slightly from 9 to 10 to 8 and the southern row upgraded from 31 to 23 to 16. Similarly, the blocks east of Elizabeth Street have gained status relative to those west of Murray Street.

Central Property Shifts: Explanation

Two questions arise concerning the changes in spatial arrangement of central property concentration; one concerns scale and the other, direction. The movement in space has been small, with the emphasis shifting through as little as two city blocks. The lack of directly comparable evidence by this standard of measurement makes it difficult to say how representative or unrepresentative the degree of change is for the time and the size of urban place involved. It may be proposed that Hobart's overall growth renders its analysis a study in stability rather than change, but the proposition cannot hold absolutely in the light of the foregoing chapters, and relatively only by comparison with the truly metropolitan cities of the world. Many of the less spectacular participants in the process of urbanisation may find the rise or fall of central rows by a quarter or a third of their nineteenth century share of property values in keeping with their own experience. And on the evidence of land use studies the more widely expansive centres soon draw retail activities outward with the growing population. This may mean absolute as well as relative decline of the city core, but it may alternatively mean a slowing of central expansion though "business volume and property values will continue to rise as the total population increases."[5]

In seeking to explain the direction of change there is less reason for uncertainty, though ample room for imprecision. Consideration was given the possibility of using statistical tests after the manner of Yeates' regression analysis of sample Chicago

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5 R.U. Ratcliff: The dynamics of efficiency in the locational distribution of urban activities, p.318 (8)

land values (9) or Carey's factor analysis of Manhattan population (10); but the lack of consistently detailed data for likely relevant variables other than those of values, functions and distance influenced reliance on detailed analysis and thorough knowledge of the relatively small area concerned. Perhaps the most obvious question which the data poses is why a southern and to some extent eastern movement of property emphasis when the major urban expansion has been northward? The extension of commercial activity along the Elizabeth Street axis and the later development of the small North Hobart shopping centre on the fringe of the colonial town area has been seen to follow the early residential trend. On the east the Domain proper and its nineteenth century Battery extensions on to Macquarie Point across the road leading to the new Government House formed a distinct barrier to possible central area expansion, whereas the low land westward of Harrington Street offered a number of blocks of flat or gently rising and easily accessible land before the steeper slopes of West Hobart were met.

Two major influences appear to have worked in favour of the southern movement of leading blocks and against their going with the northern trend of settlement and of commercial penetration (cf. Figures 3.4 and 11.3). The port has been so closely connected with the town's central structure and functions and more generally with its fluctuating fortunes that its attractive force can hardly be over-rated. Although the settlement was never so dependent upon port functions as during the early years of occupation, Sullivan Cove was still in the process of major western margin improvement in 1847. The establishment of hotels, warehouses and (more lately) offices on re-made and reclaimed waterfront blocks such as 88 and 118, and the extension of the Elizabeth Street thoroughfare through the former barrier of Block 87 to meet an extended Davey Street and then Franklin Wharf, ensured the closer integration of internal and external functions. Not only did ships tie up at the foot of the main street within four blocks of the commercial core, but the merchants of the town substantially

administered the operation and development of this important functional unit.

In addition to the mainly external transport focus was the influence of internal lines and nodes of communication. Soon after Block 87 was vacated as the site of Government House for 50 years, the Town Hall was built to the east of the Elizabeth Street extension and the public park of Franklin Square occupied the west. This was the first open space near the commercial core and the only one between the core and the port. Its adoption as a focus of tram and bus services was ideal: the main concentration of urban property lay just a block away, most government offices and leading public buildings either adjoined or were close to the square, and transport lines could proceed to southern and eastern suburbs without traversing the most densely traficked commercial centre. The railway station at the foot of Liverpool Street must have exerted some influence on the increase in property concentration and residential replacement east of Elizabeth Street. However, the pedestrian flow which it generated was severely limited by the restriction of the line to one direction, by the slow rate of population growth after the railway's inception, and by the advent of tramways to inhibit any consideration of a suburban system, even had terrain and population size not been inimical.

Access to transport lines and their access to people is a factor, explicit or implicit, in all the accepted hypotheses of urban growth, and case studies provide the necessary substance. Increasing flexibility of transport is generally believed to increase accessibility from central to peripheral areas, as evidenced by the outward movement of residential population. It also increases accessibility to the centre by suburban populations, and given the greater range of central services the core should benefit. Only if accessibility is reduced by inner congestion will the periphery and not the centre benefit. The balance or imbalance of inward and outward accessibility and the location of the lines of access (transport routes) underlie opposing forces in urban land values.

The opening up of suburban land coupled with improved transport mobility (public or private) should increase competition among sites (any one site with all the others) and reduce site rents (land values) in general (11). However, in initial conflict is the knowledge that a new transport line or improved service will raise land values in the area served, and by increasing accessibility to the city centre for a larger population will make central sites more desirable and more valuable.

Wendt (12) seems unnecessarily to emphasise Ratcliff's attachment to the former proposition, when in fact he recognises that there is "a continuum of locational quality in which the value of even the best site cannot exceed the measure of its productivity to its user."[6] Although property values and not land values have been the empirical concern of this study, there is no doubt that until 1954 at least (and, on visual evidence, up to the present) the productivity of central Hobart property has continued to increase by virtue of its accessibility to an increasing number of people, thereby favouring Wendt's emphasis on the role of the centre. However, as Hoyt (4) points out, no model or principle for the distribution of land values is applicable to all times and places, and doubtless the same is true of property values, if for no other reason than that they incorporate land values. This operates between population centres as well as within them.[7] In his Chicago study Yeates (9) found that his model which explained 77 percent of land value distribution in 1910 could only account for 18 percent in 1960, owing largely to decline in central influence in favour of sectoral differences and the relative increase in peripheral values. In measured area another American study (15) found a slight decrease in the commercial land use of 22

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6 R.U. Ratcliff: Commentary: on Wendt, Land Economics, p.362 (13)

7 Hoyt (4) indicates that residential land on New York's 5th Avenue cost $6,000-$9,000 per front foot in 1911 compared with $300-$500 in cities of the 200,000-400,000 population range. Within New York, a single Broadway lot out of an estate which cost its deceased owner $500 per acre was auctioned in 1865 for $80,000, and the estimated value of the city's real estate rose from $65 million in 1826 to $402 million in 1863 — Smith: (14), p.117

cities over a ten-year period. If these larger examples of urbanism are any guide what does seem likely is that Hobart's central property value concentration will never, in the age of the automobile, reach the levels which continually increasing urban population might have conferred in the days of "monopoly value of sites at the converging points of mass transportation".[8]

A Descriptive Model of Urban Growth

It is sometimes useful to reduce detailed findings to simple diagrammatic form for purposes of comparison with parallel studies and the possible discovery of universal factors, relationships, and even truths. Although the findings are usually of fact -- subject to the reliability of the raw data[9] -- the derivation of those models is often subjective or intuitive. Figure 17.6 is a schematic interpretation of spatial distributions previously presented, in particular in the maps of average valuations (Figures 2.4 and 12.2) and block percentage functions (Figure 3.4 and 11.3). Since the purpose of this study includes pointing up the relevance of property values to the analysis of evolving urban structure, the juxtaposition of the 1847 and 1954 value-function schemes facilitates the process.

First of all, it is clear that vast spatial changes are not indicated: there is some expansion of the core area dominated by commercial functions and property; a consequent outward movement of the northern multi-functional transition zone; and a diminution of the eastern and western transition areas through inner commercialisation. The port has intensified its structure and diversified its marginal functions but retains its original bounds and focus. Residential areas show considerable persistence in general, but some interesting changes in particular. Given Hobart's positive relief and the restriction of site between mountain foothills and river estuary, the tendency of the nineteenth century town and its mid-twentieth century inner area to exhibit sectoral tendencies is not

8 H. Hoyt: Changing patterns of land values, Land Economics, 36, 1960, p.117

9 See Floyd's caution in (16)

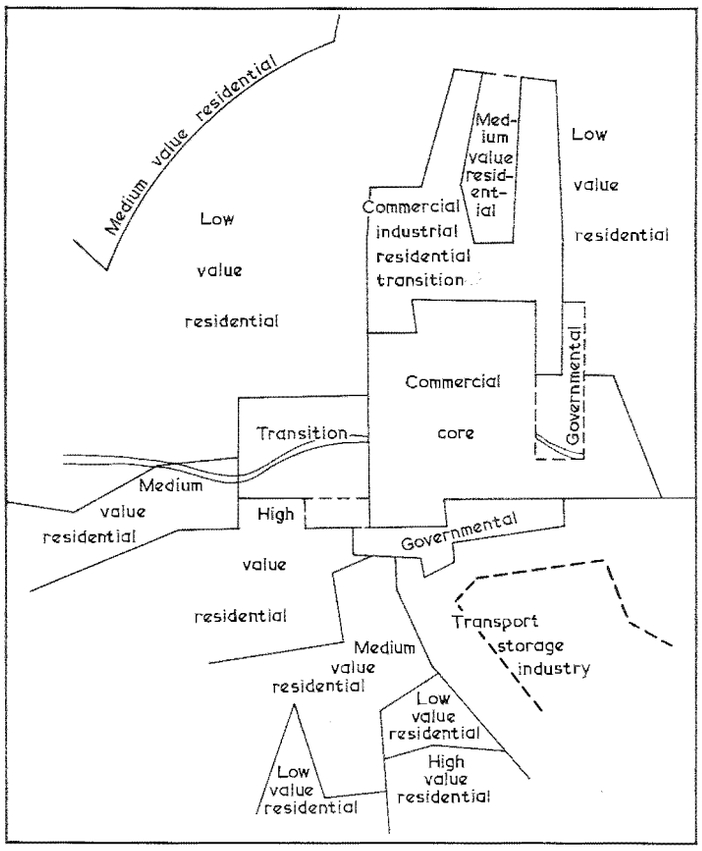
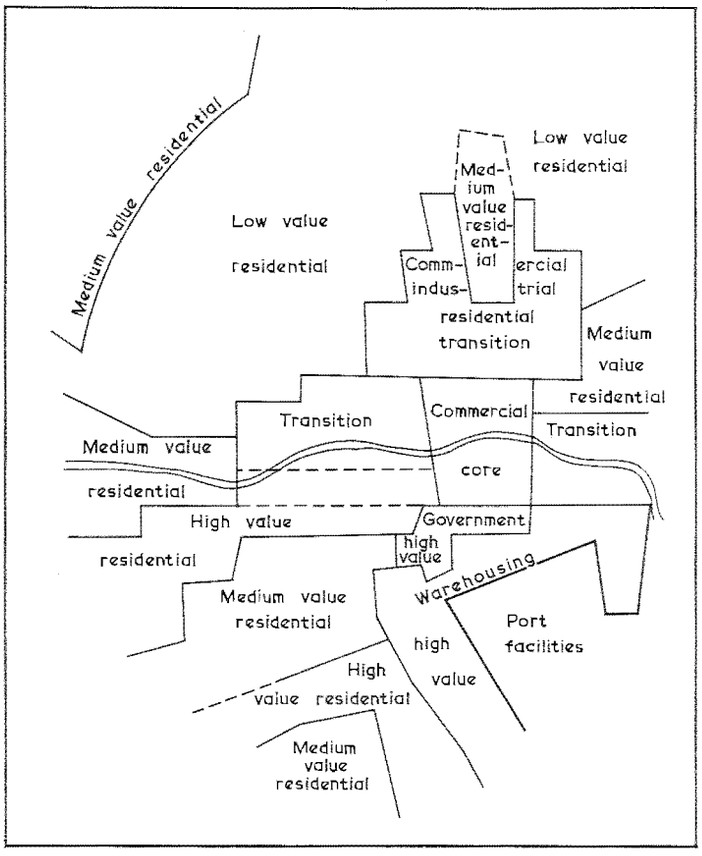


Fig. 17.6 Model of Hobart's urban structure in 1954 (above compared with that of 1847 (below). An overall impression of stability combines with significant evolutionary movements in detail. (Derived from the distribution of dominant functions and property values)



entirely unexpected. A site such as Hobart's would seem (at the risk of appearing determinist) predestined to favour sectoralism after Hoyt rather than concentricity after Burgess. There is at least the suggestion of Robson's Sunderland finding[10] of sectoral and concentric juxtaposition (like that of Jones (18), mainly on opposite sides of a central river) although the zonal quality was stronger around the earlier core than the later. By 1954 the transitional elements had become more thoroughly identified with northerly progression,[11] and the pattern was largely one of (several) residential sectors and one transport sector in the south, with two broad residential tracts in the west and northeast. Dividing these was the northward thrust of commercial and industrial penetration, two arms of which (along Elizabeth and Argyle Streets) were themselves still divided by elevated land (the Trinity Hill area) carrying medium value residential property.

The association of residential quality with variations in elevation and water access inevitably come through in the model. Wedges of high and medium value residential property have persisted on the higher ground around Davey Street and near the once functionally and still socially important military barracks, reaching a peak of emphasis in the 1901 rank distribution (Figure 17.7, cf. 12.4). A wide residential zone of lower value occupied the rising terrain from southwest to northeast, but the overlooking sites (as against the overlooked) tended to be medium rather than low value. In the south a small sector of high value residential property (on the point of Battery Point) persisted in close proximity to the transport and storage functions of the port zone for the advantages of water access and travel convenience to the city centre; but lower value areas developed elsewhere -- in the 3rd quintile in 1901, in the 2nd and 1st quintiles by 1954 (Appendix XXXIX).

These kinds of association are far from new: Firey (20) showed

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10 B.T. Robson: An ecological analysis of the evolution of residential areas in Sunderland, Urban Studies, 3, 1966, p.136 (17)

11 First indicated by P. Scott (19)

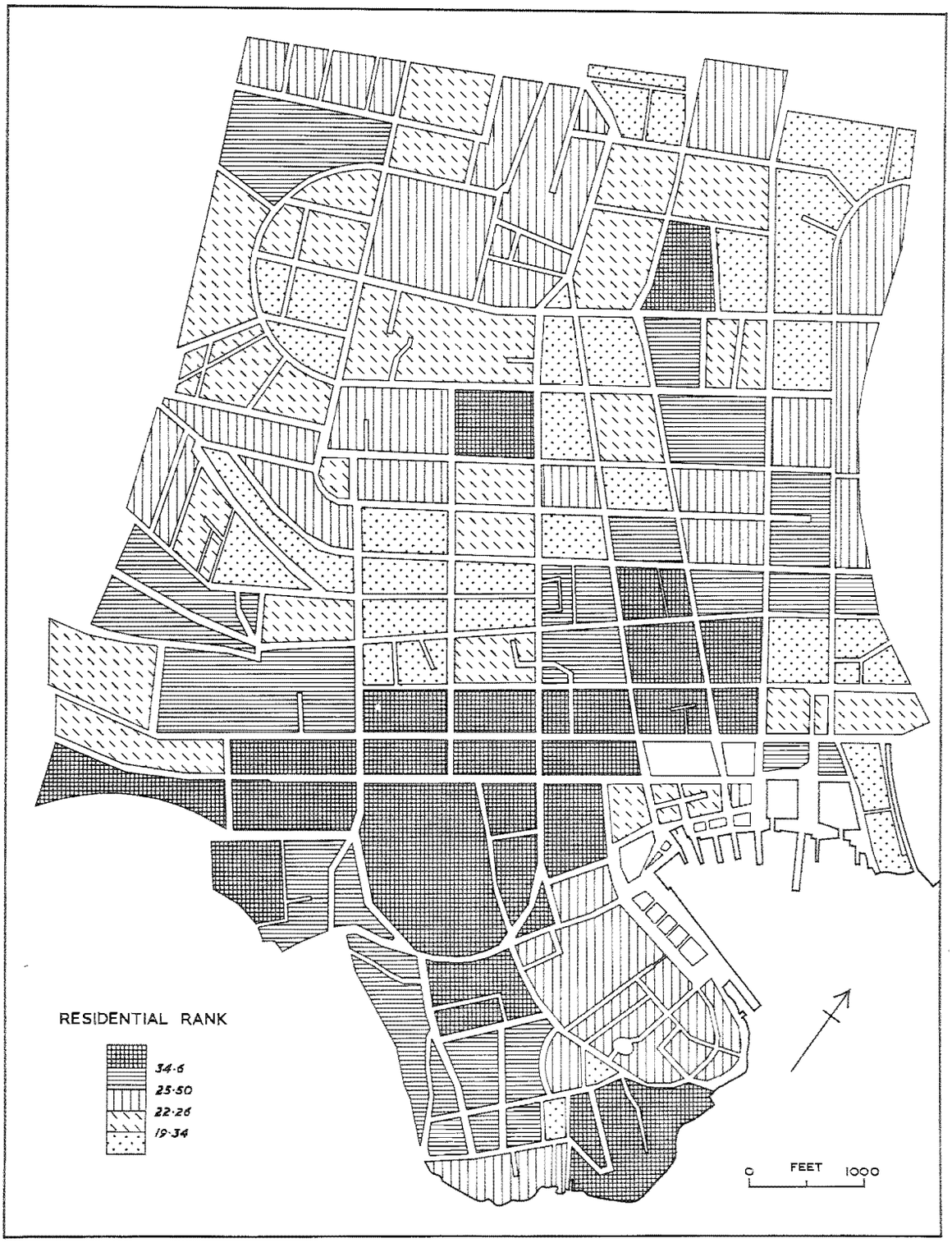

Fig. 17.7 Distribution of residential rank 1901, by blocks. Quintile values are in pounds (Assessment Roll, 1901).

the value of elevation and proximity for the Beacon Hill district of Boston; Clark (21) indicated the association of higher value residences with the parkland Town Belt of Dunedin; Robson's highest rated area adjoins the sea coast. And so on. However, new findings are always of interest in this field despite the difficulty of regularising them. Resident populations develop an uncanny facility for balancing the advantages of accessibility against the advantages of site and position. While strong social forces provide a basis for contiguous extension of like quality uses (and thus for a sectoral growth hypothesis), changes in functional distribution, in the quality of urban fabric, and in the means of access to and from one or more functional foci may disturb the sensitive balance and provide the need for reassessment.

In the final chapter some developing characteristics of Hobart's occupants in the last quarter or so of the city's evolution are examined.

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(2) Assessment Roll for the City of Hobart, Hobart Gazette, 97, 6707, 15 October 1901, 1891-1991

(3) Assessment Roll 1954/55, Tasmanian Government Gazette, 1954, 1509-1765

(4) H. Hoyt: Changing patterns of land values, Land Economics, 36, 1960, 109-117

(5) K.W. Robinson: Sydney, 1820-1952: a comparison of developments in the heart of the city, Australian Geographer, 6, 1952, 6-12

(6) D. Ward: The industrial revolution and the emergence of Boston's central business district, Economic Geography, 42, 1966, 152-171

(7) P.F. Mattingly: Delimitation and movement of CBD boundaries through time: the Harrisburg example, Professional Geographer, 16, 6, 1964, 9-13

(8) R.U. Ratcliff: The dynamics of efficiency in the locational distribution of urban activities, Readings in Urban Geography (Mayer & Kohn, eds.), Chicago, 1959, 299-324

(9) M.H. Yeates: Some factors affecting the spatial distribution of Chicago land values, 1910-1960, Economic Geography, 41, 1965, 57-70

(10) G.W. Carey: The regional interpretation of Manhattan population and housing patterns through factor analysis, Geographical Review, 56, 1966, 551-569

(11) R.U. Ratcliff: Urban Land Economics, New York, 1949

(12) P.F. Wendt: Theory of urban land values, Land Economics, 33, 1957, 228-240

(13) R.U. Ratcliff: Commentary on Wendt's theory of land values, Land Economics, 33, 1957, 360-362

(14) W. Smith (ed.): Cities of Our Past and Present, New York, 1964

(15) J.H. Niedercorn & E.F.R. Hearle: Recent land-use trends in 48 large American cities, Land Economics, 40, 1964, 105-110

(16) B.N. Floyd: Some comments on the scope and objectives of geography in the developing areas, Nigerian Geographical Journal, 9, 1966, 11-23

(17) B.T. Robson: An ecological analysis of the evolution of residential areas in Sunderland, Urban Studies, 3, 1966, 120-142

(18) E. Jones: A Social Geography of Belfast, London, 1960

(19) P. Scott; Hobart: an emergent city, Australian Geographer, 6, 1955, 19-31

(20) W. Firey: Land Use in Central Boston, Harvard, 1947

(21) W.A.V. Clark: Dunedin at the turn of the century, New Zealand Geographer, 18, 1962, 93-115

Chapter 18

Twentieth Century Population and Politics

Adna Ferrin Weber introduced his pioneer work on "the most remarkable social phenomenon....the concentration of population in cities"[1] by contrasting the 33 percent of Australia's population in cities of 10,000 or more in 1891 with the U.S.A.'s three percent similarly located a century earlier.[2] The "tendency towards concentration or agglomeration" which Weber recognised as "all but universal in the Western world"[3] is now so well established and so popularly recognised as to require no further emphasis in the broad. Both as a widely geographical and narrowly structural phenomenon, this socio-economic process is now commonly known as urbanisation.

Hobart differs from the other Australian capitals in its lower degree of primacy within the urban system of its State. In 1899 Weber pointed out that several countries contained larger proportions of urban population "but in none of them is it so massed in a few centres".[4] In 1939 Mark Jefferson examined the size relationship between largest and next largest cities and noted the tendency of London to perform functions which might otherwise have fallen to the resident Australian capitals (2). More recently, in considering the concept of primacy in relation to likely patterns of urban development, Rose summed up the Australian situation thus: "unusually low national primacy contrasts with quite exceptionally high state primacy and.... is in large measure a result of this high degree of state primacy."[5] There is no reason to believe that Hobart's lesser dominance over other urban centres in its State system (Table 18.A)

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1 A.F. Weber: The Growth of Cities in the Nineteenth Century, p.1 (1)

2 The national populations were each a little short of 4 million at the respective times

3 Weber: loc. cit.

4 Ibid., p.138

5 A.J. Rose: Dissent from Down Under: metropolitan primacy as the normal state, pp.3-4 (3)

Table 18.A

State and Federal Urban Primacy*

Political Unit	1911	1961	Primate City
New South Wales	90	85	Sydney
Victoria	87	91	Melbourne
Queensland	75	81	Brisbane
South Australia	92	92	Adelaide
Western Australia	79	90	Perth
Tasmania	58	58	Hobart
Australia	41	41	Sydney

* Largest city as percentage of the four largest in that political entity

Source: Rose, p.24(3)

depends upon the relatively small size of the Tasmanian population; simply, it derives from the concurrent foundation and development of Launceston whereas each of the other States concentrated the whole of its initial settlement impetus into one fairly circumscribed area.[6] The overall growth rate of Hobart in this century is not markedly less than those of the larger capitals (Figure 18.1), but its smaller size at the time of Federation has, in effect, been perpetuated.

Developing Population Structure

Some of Hobart's population characteristics since 1954 were touched upon in Chapter 13. The emergence of the mid-century structure has of course depended on universal trends of birth and death rates, but also upon local conditions affecting these. The improvement of sewerage and drainage within the city has almost certainly had a more profound effect upon population increase than is generally recognised. Examples of poor sanitation and decrepit

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6 The physical nature of the political entities, their resources etc. naturally became important as settlement spread. Very generally, each mainland capital became associated with intensive coastal development grading off to increasingly extensive land use in the interior of the State. The movement toward Tasmania's also extensive interior was from two sides -- a simple but persistently influential difference.

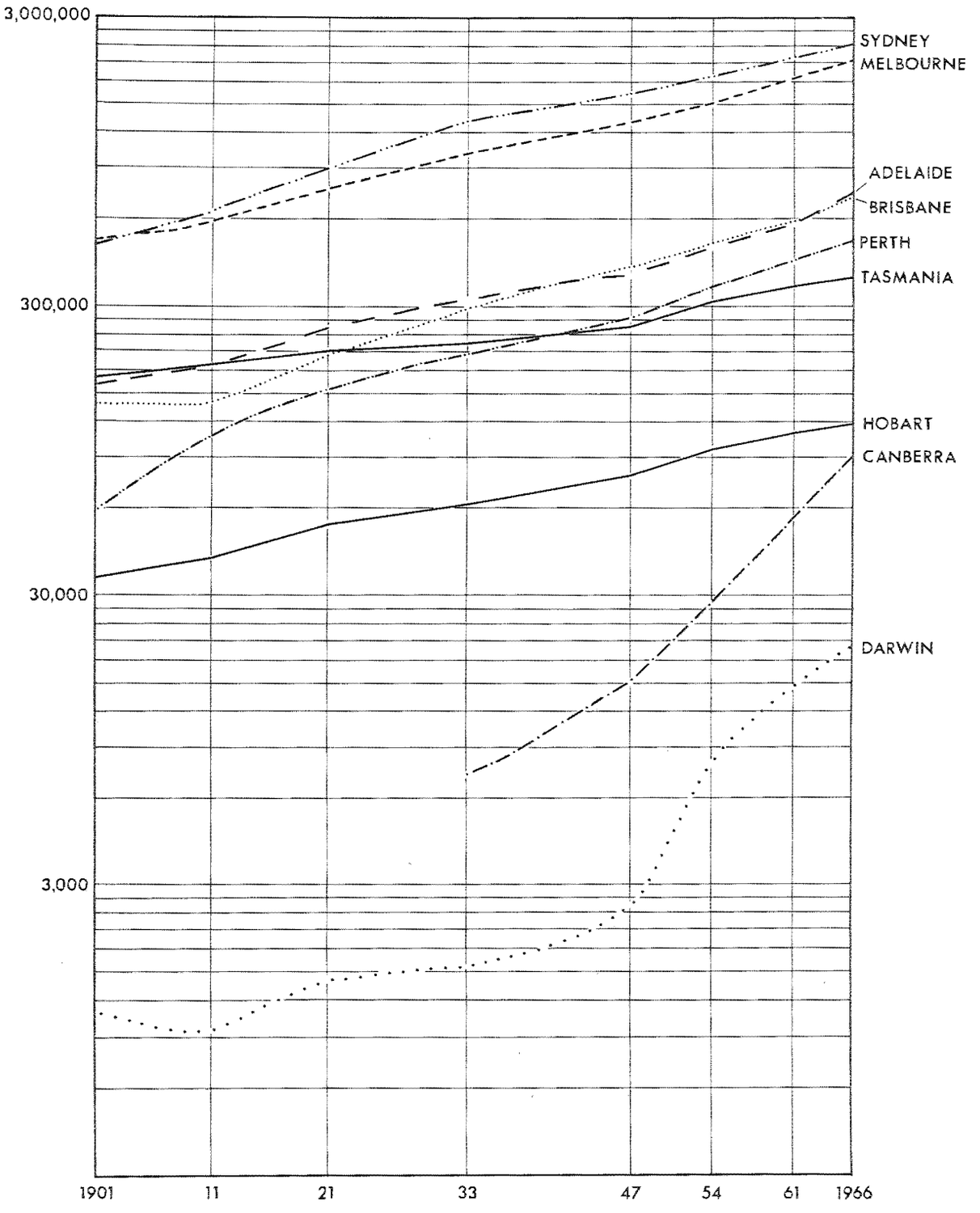

Fig. 18.1 Population growth of Australian capital cities and Tasmania, 1901-1966 (Commonwealth Census, State Year Books).

buildings still exist even in the Western world, many being much less publicised than Harlem or the Gorbals. However, conditions in late nineteenth century Hobart were in such contrast to the beauties of the site as to tax credulity.

In his annual report for 1879 the Officer of Health was unable to attribute an improvement in public health to any notable change in the year's weather, but (despite official caution) he knew where the answer lay: "Post hoc propter hoc conclusions are too often fallacious for me to urge that the improvements in the sanitation.... were solely, or even principally, owing to the abatement of many nuisances injurious to public health."[7] Sufficient room for improvement remained to draw one of many incisive commentaries: "As long as privy cesspits, polluting the atmosphere and saturating the soil with their poisonous contents, are allowed to exist; with pig-sties in close proximity to human habitations; and a great elongated and comparatively stagnant cesspool traversing the very heart of the City; and no steps taken to secure freedom from adulteration or injurious condition of the food and drink supplies of the population, the health of the inhabitants, of even such an admirably situated place as Hobarton is, must suffer....."[8] The officer stood amazed that the Bye-law of 1855 designed to protect the Hobart Rivulet from continuing to be a receptacle for filth and rubbish was still in abeyance at this time. And we may be amazed that the death rate was only about 23 per 1000 — 641 deaths against a mid-year population estimated at 27,700 (though probably 1,000 less — see Table 14.A — making the rate 24 per 1,000).

By 1884 the Health Officer was able to express pleasure at the passing of legislation prohibiting further cesspits, empowering him to close those found in bad repair, and setting January 1887 as the time limit by which all had to be filled in. Further, pigs had been prohibited within 25 yards of a street or dwelling, and

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7 Legislative Council Papers and Journals, 1880, Vol. 29, Report 35

8 Ibid.

the rivulet was under improvement between Argyle and Elizabeth Streets, with the prospect of retaining walls and graded bottom back to Molle Street. These measures had not yet reduced the overall death rate, which stood at 24 per 1,000 for city and surrounding districts in 1884 though the 702 deaths included pauper invalids at New Town, country patients in the hospital, and those at sea on ships registered at Hobart. One heartening trend was the decline of infant mortality from 17 and 14 percent in the two previous years to 11.84 percent in 1884 (134 deaths for 1,131 births).[9]

With increasing enlightenment in matters of sanitation and with a wider implementation of vaccination programmes, the twentieth century inhabitants of the city have greatly improved their chances of survival and increased their longevity. The population pyramids of Figure 18.2 illustrate the point, while showing fluctuations at the base of the pyramid resembling those of Tasmania and Australia in response to the 1930s depression and the 1939-45 war. The fact that the diagrams relate to the City proper, excluding outer suburban areas, means a significantly higher proportion of old people in the structure than in Tasmania's in consequence of the suburban migration of the residential function, leaving a concentration of elderly people near the centre. Thus persons 65 years and over represented 6.6 percent of the City population in 1921 and 10.3 percent in 1954. The Tasmanian counterparts were 4.7 and 7.6 percent. The differential between City and State in the youthful age groups was even greater: 29.1 and 34.4 percent respectively in 1921, 23.7 and 31.6 percent in 1954. With the proportions of young and old moving in opposite directions the working age groups maintained a fairly stable share of the whole population -- 64.3 percent in 1921 and 66.0 percent in 1954 -- but the average age of the sector had notably increased and its future members from within the City structure were reduced. In such typically urban conditions in-migration from the more highly

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9 Journals and Printed Papers of Parliament, 1885, Vol. 5, Report 27

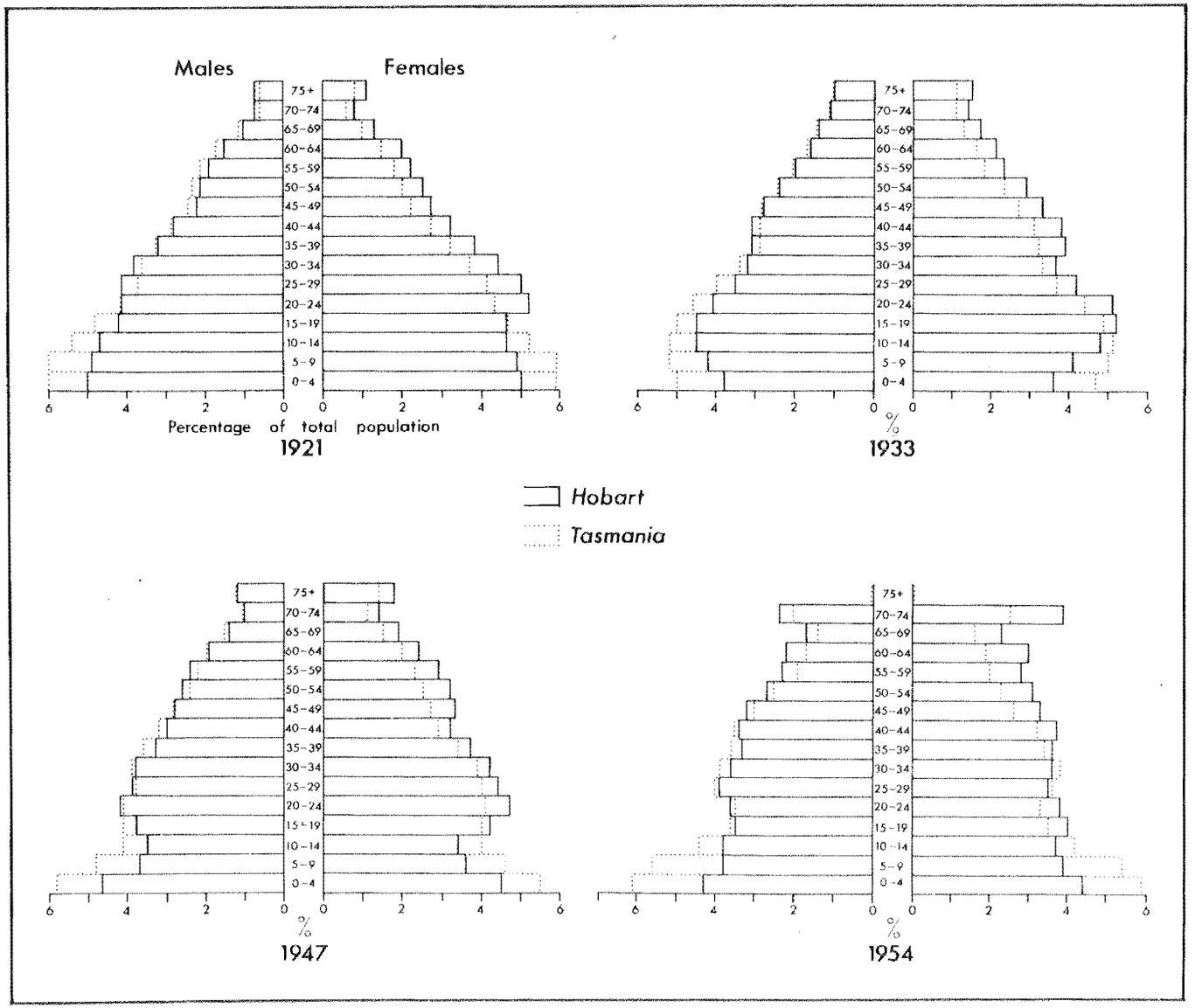

Fig. 18.2 Population structure of the City of Hobart 1921-1954 by quinquennial age groups. Tasmania compared (Commonwealth Census)

reproductive rural areas has an increasingly important role.

Between 1954 and 1961 the proportion of Tasmanians living in towns with populations of 750 and over rose from 66.0 to 70.5 percent, and while the State population grew by 13.5 percent, Hobart added 21.5 percent.[10] Clearly the relative strengths of youngest age groups in the State and its capital (Figure 18.2) did not provide for such a favourable urban differential. Although metropolitan Hobart's urban amenities and employment opportunities have provided the greatest attractive force in intrastate migration, giving Hobart a growth rate in advance of Tasmania's for every intercensal period this century (see Table 14.A), the capital is almost certainly more susceptible to losses by interstate migration than other areas. This particularly affects the younger age-groups, and (although statistics are not available) especially the more highly trained, who tend to be concentrated in the urban area.

Within the metropolitan area, the City statistical division first showed the onset of population decline for structural reasons (it had reduced by 350 people between 1861 and 1870 -- see Table 14.B) after the 1947 census. This was a late expression of a widely recognised phenomenon associated with inner functional segregation and

Table 18.B

Average Annual Rate* of Population Change 1921-1961

Intercensal Period	Hobart City	Hobart Metropolitan	Tasmania
1921-1933	0.67	1.3	0.54
1933-1947	1.38	1.5	0.88
1947-1954	-0.29	3.5	2.99
1954-1961	-0.23	2.2	1.92

* Period increase as percentage of beginning population (not mean population as in Table 14.A), divided by number of years

Source: Commonwealth Census 1921-1961 (City and Tasmania per R.S.J. Farmer)

peripheral residential growth. Weber gave considerable recognition to the "development of suburban towns", seeing it as a means whereby

[10] R.S.J. Farmer: Population, p.50 (5)

the intensity of concentration and the accompanying ills of overcrowding would be relieved.[11] He showed not only that outer growth areas were catching up and passing their traditional city area populations in the last decades of the nineteenth century,[12] but that 11 of London's 30 central districts exhibited absolute population decline from 1861. In North America the largest cities grew more rapidly than their outer rings of suburban occupation until the 1920s, although New York began to experience "relative deconcentration" as early as the 1850s (7).

Developing Employment Structure

The introduction of some large-scale manufacturing industry after World War I might have been expected to produce the greatest modification to Hobart's employment composition since the reassertion of population growth from the beginning of this century. It did not, however, reproduce the achievement of Gothenburg's 'industrial revolution' which pushed that port-city's population from 53,000 to 105,000 during 1868-1890. Hobart moved from 52,000 to 110,000 during 1921-1961, by which time industrial employment was about ten percent lower than the Swedish city's 11,900 in 1890 (8). The effect of increased manufacturing is apparent in Figure 18.3, which shows employment in Hobart City from 1921, even though the urban areas most affected were those adjoining the industrial plants, mainly beyond the city limits. Inner Hobart's 32 percent employment in 1921 manufacturing exclusive of building has never been repeated, and even the metropolitan figure in 1961 reached only 27.4 percent. Commerce, including finance and property, made steady employment gains except in 1947 when wartime disruptions were apparently still effective. The overall pattern of increase is compatible with the increasing concentration of central commercial property, though as mentioned in Chapter 13 metropolitan Hobart's commercial index of

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11 A.F. Weber, op. cit., pp.458-475

12 Berlin, for example, had 635,000 in the walled area in 1885, 1,315,000 inside the city limits, and 1,538,000 in Greater Berlin (p.466)

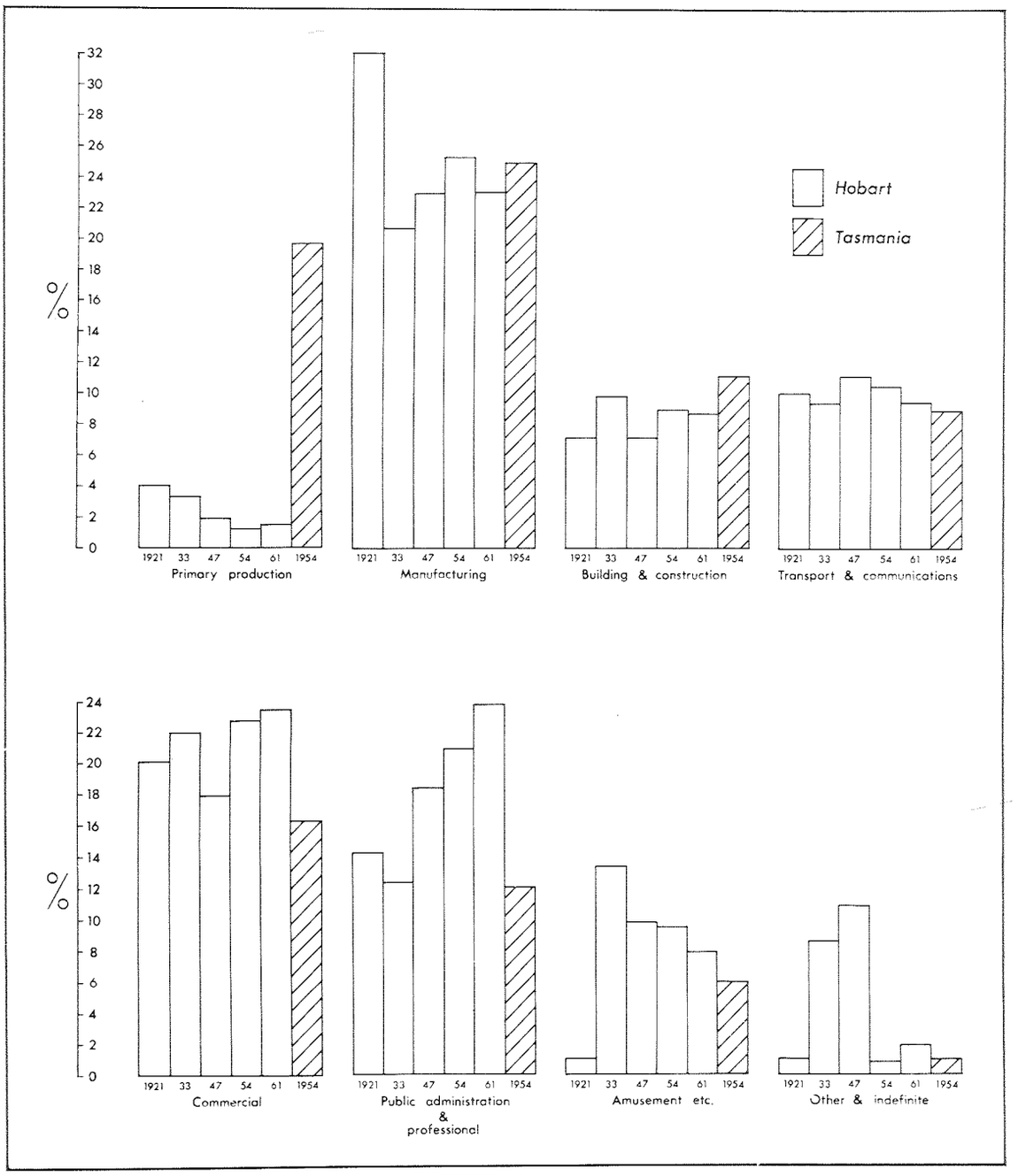

Fig. 18.3 Employment structure of the City of Hobart 1921-1961, by major occupational categories. Tasmania 1954 compared (Commonwealth Census)

localisation was below those of the sub-million capitals in 1954, the date of the last property valuation analysed. The increase in commercial employment and the decline of manufacturing at the 1933 census would seem to point up the greater effect of the world depression on city-forming than on city-serving functions.

The proliferation of government agencies and the strengthening professional and 'office' employment generally is in accord with growing urban maturity and the rapid development of the tertiary sector. However, transport and communications, separately or in combination, showed little tendency to increase their share of employment as the built-up area expanded. Perhaps the association of the largest suburban area coverage with the age of the private automobile, rather than any pronounced boom in mass transit, is responsible. The decline of the amusement group by several percent of the work force does not represent a growing devotion of the populace to serious matters, but rather the reduction and extinction of the domestic service category included in the earlier graphs.

Hobart's relation to Tasmanian employment structure indicates its place in the island's economy; comparison with the other capitals may be more a measure of its urban development. Hobart shared the 1954 major urban pattern of employment in a general way (Table 18.C).

Table 18.C

Employment Localisation of the State Capitals 1954

Industry	Hobart	Perth	Adelaide	Brisbane	Melbourne	Sydney
Manufacturing	96	91	128	101	146	134
Engineering	141	82	165	76	134	145
Vehicle mfe.	43	106	211	101	135	129
Building and construction	115	135	96	108	82	82
Commerce	113	144	127	127	109	114
Finance and property	145	133	122	136	128	140
Public and professional	151	132	107	135	108	122
Government	236	161	139	187	122	122
Transport and storage	103	115	101	117	90	109

Source: Commonwealth Census 1954

The city had some degree of concentration in fields of activity such as building, commerce and transport, but it did not display any notable basic strengths. In particular, it lacked evidence of a really broad urban manufacturing base. This could be inferred from the comparison with Tasmania and with Australia as a whole in Table 13.D, but the break-down of capital city industrial structure in Table 18.D shows more clearly the weaknesses in a majority of manufacturing areas, which fail to offset the city's strength in the engineering and food producing industries.[13]

Table 18.D

Employment Surplus and Deficit in Capital City Manufacturing Groups 1961

Industrial Group	Hobart	Perth	Brisbane	Adelaide	Melbourne	Sydney
Cement, bricks, glass	-70	950	257	629	-3,013	894
Petrol & coal products	-55	16	-227	-357	-836	718
Engineering, founding	1,414	-1,163	-3,862	4,198	-6,978	4,443
Ships, vehicles	-803	1,016	-835	5,889	-204	-3,023
Textiles, yarns	-22	-1,105	-1,471	-1,099	2,906	-1,286
Clothing	-594	-1,052	235	-3,537	13,206	2,639
Boots, shoes	-107	-88	-128	-241	4,435	-677
Food, drink	1,353	187	3,375	-2,285	-10,800	-13,006
Sawmilling	-131	188	-91	-1,008	-8,930	-9,492
Furniture	8	614	912	227	90	913
Paper & products	83	825	1,242	-1,046	38	6,098
Chemicals, paints	-322	-56	-742	-175	2,713	5,090
Jewellery	-32	15	-20	-26	926	293
Skins, leather	-64	-43	427	-268	665	1,097
Rubber goods	-112	317	586	-401	1,670	938
Instruments	18	-57	-93	-143	1,323	578
Plastic products	-87	-225	-284	-368	2,081	973
Other manufacturing	-32	6	11	4	226	1,736
Undefined mfg.	-32	6	11	-46	256	354

Source: Logan, p.142 (9)

There is clearly a correlation of industrial diversity or 'balance' with city size, although the relationship is not a simple one. Sydney

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13 In fact the absolute surpluses outweigh the deficits in Table 18.D (after Logan), using numbers of workers. The cities are really only comparable in their plus or minus characteristics, since Sydney's numbers relate to a manufacturing force of 300,000, Hobart's to 10,000. The engineering group accounts for about 30 percent of all Australian industrial employment so that a surplus here is not nearly of equal strength to an equivalent number in, say, clothing manufacture. The method employed by Logan is that of McGovern (10)

and Melbourne have few weak sectors of industrial activity, being only deficient in five or six of the 19 groups of Table 18.D. Despite its much greater total manufacturing strength than Brisbane's (Table 18.C) Adelaide had 14 deficit groups compared with Brisbane's 10, but this results from its very marked concentration on automobile manufacture. Perth probably provides the best yardstick for Hobart, being nearest in size and faced with similar problems of isolation from the south-eastern mainland focus of economic activity, and here we find a notable measure of self-sufficiency with only eight deficit areas compared with Hobart's 14. Interstate governmental competition for new manufacturing has necessarily found Tasmania and Hobart dependent upon attractions such as Hydro-electric power, waterfront sites and labour availability, which do not have such wide appeal as the markets and transport advantages of Sydney and Melbourne. While the small capital has acquired sufficient momentum and provides sufficient diversity of employment and services to avoid the problems facing small cities removed from metropolitan influence -- which may involve not only slower growth but actual decline (11, 12) -- the growth capacity of the '100,000 city' as against the 'million city', particularly with a clearly circumscribed hinterland, is limited. Any growth, however, produces changes in the infrastructure, and we turn finally to examine the nature and development of political affiliation in Hobart's electoral subdivisions during most of this century to date.

Trends in Political Affiliation

A period of 50 years is long enough to produce considerable changes in area-identification with particular political viewpoints. The Australian parliamentary system (13) and the stability of its operation, coupled doubtless with less tangible elements of the national character (14), has worked toward a rather long cycle of change. This general circumstance is exemplified by the Denison Electorate consisting at the beginning of the century of six subdivisions, and in the 1960s of eight. The outer suburbs of Hobart extended as time passed into four subdivisions of the adjoining

Franklin Electorate (see Table 13.G).

The eight Denison subdivisions (Figure 13.1) fall broadly into three types of political identification. North Hobart (Figure 18.4) reasonably represents two other subdivisions of consistent Labour support: Hobart (combining East and Central Hobart from 1958) and Moonah (taken out of Glenorchy in 1922 and transferred from Franklin to Denison in 1955). New Town (Figure 18.5) and Nelson have a long history of Liberal association. South Hobart (Figure 18.6), West Hobart (adjoining on the north), and Queenborough (adjoining on the south) are, relatively, transitional areas.[14] The margin of support for one party or the other in the three representative areas since 1912 is shown in Table 18.E for State elections.

Table 18.E

State Party Ascendancy in Three Subdivisions 1912-1964
(percentage difference in primary votes)

Election	North Hobart		South Hobart		New Town	
	Labour	Liberal	Labour	Liberal	Labour	Liberal
1912	5.0	—	—	10.0	—	29.2
1913	6.6	—	—	12.2	—	26.0
1916	3.6	—	—	8.6	—	18.2
1919	—	9.8	—	17.4	—	25.4
1922	—	5.2	—	21.0	—	16.0
1925	14.7	—	—	7.4	—	2.7
1928	5.2	—	—	15.5	—	6.6
1931	—	5.7	—	29.6	—	29.8
1934	21.4	—	—	5.7	—	6.9
1937	32.0	—	7.7	—	8.4	—
1941	45.1	—	21.3	—	22.5	—
1946	15.2	—	6.8	—	*13.9	—
1948	19.7	—	6.5	—	* 9.6	—
1950	13.2	—	—	5.0	—	15.8
1955	18.4	—	5.7	—	—	10.2
1956	21.8	—	4.8	—	—	8.8
1959	15.0	—	—	0.3	—	12.6
1964	15.1	—	—	2.1	—	9.2

* The poll was topped by candidates representing neither major party with a lead over Labour of 8.1 percent in 1946 and 4.5 percent in 1948

Source: Electoral Returns, Journals and Papers of Parliament

North Hobart is representative of inner city trends in political association. Running from suburban North to West Hobart it was at

14 The graphs for Hobart, Moonah, Nelson, West Hobart and Queenborough appear as Appendix XL

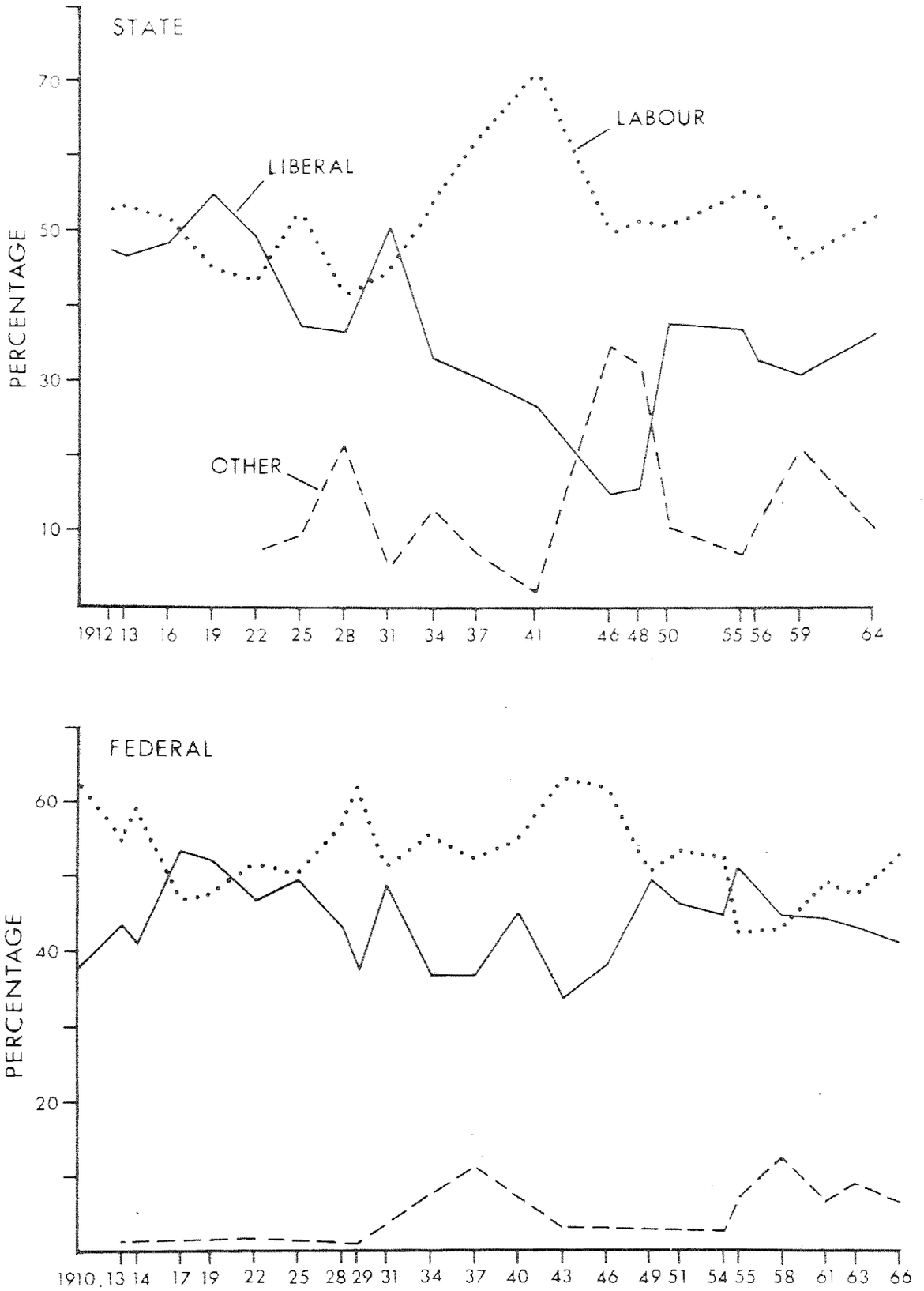

Fig. 18.4 State and Federal political affiliation in the North Hobart subdivision, 1910-1966 (Electoral Returns).

the beginning of the century already an area of commercial penetration, lower residential values and fairly high density occupation involving small lots and some apartments. Except for three elections out of 18, the latest in 1931, the area has been solidly Labour-oriented. Majorities of around five percent up to the 1930s became 20 percent and more after the depression. While the 1941 Labour majority of 45 percent could not be sustained, the Liberal vote actually dropped to 15 percent -- less than one-third the Labour vote -- in 1946 and 1948 as a result of strong third-group support. If present trends in urban structure and southern European migrant location persist, this area will continue in the pattern of the 1950s with just over half the total vote going to Labour. Federally the Liberal position is much more competitive, with closer voting from the 1930s and even small leads in 1955 and 1958. In the Hobart subdivision, including the city centre and about half the inner urban area of this study, the course of differential support has been almost identical with the North Hobart experience except that Liberal voting has been a little weaker and Labour a little stronger. This is the zone of depreciated residential property and greatest land use variety, which only the Moonah industrial area has equalled in the strength of its Labour affiliation. Since the definition of that subdivision in the 1920s its smallest State Labour majority has been 13 percent in 1931, though once again the Federal pattern has been closer with a small deficit in 1955. Labour support has in fact weakened a little in this area since its peak 77 percent share of the poll in 1941, probably associated with an improvement in housing standards and apparent economic attainment on the hill slopes of West Moonah, and in particular with the loss of the heavily industrial northern fringe to the new Derwent Park subdivision in 1955.

Just as North Hobart is a fairly subdued example of Labour-ascendant areas, New Town demonstrates Liberal orientation as the norm (Figure 18.5), but with less extremity than the Nelson subdivision. The strengthening Labour influence seen in North Hobart has also been present here, reducing Liberal majorities often over 20 percent up to

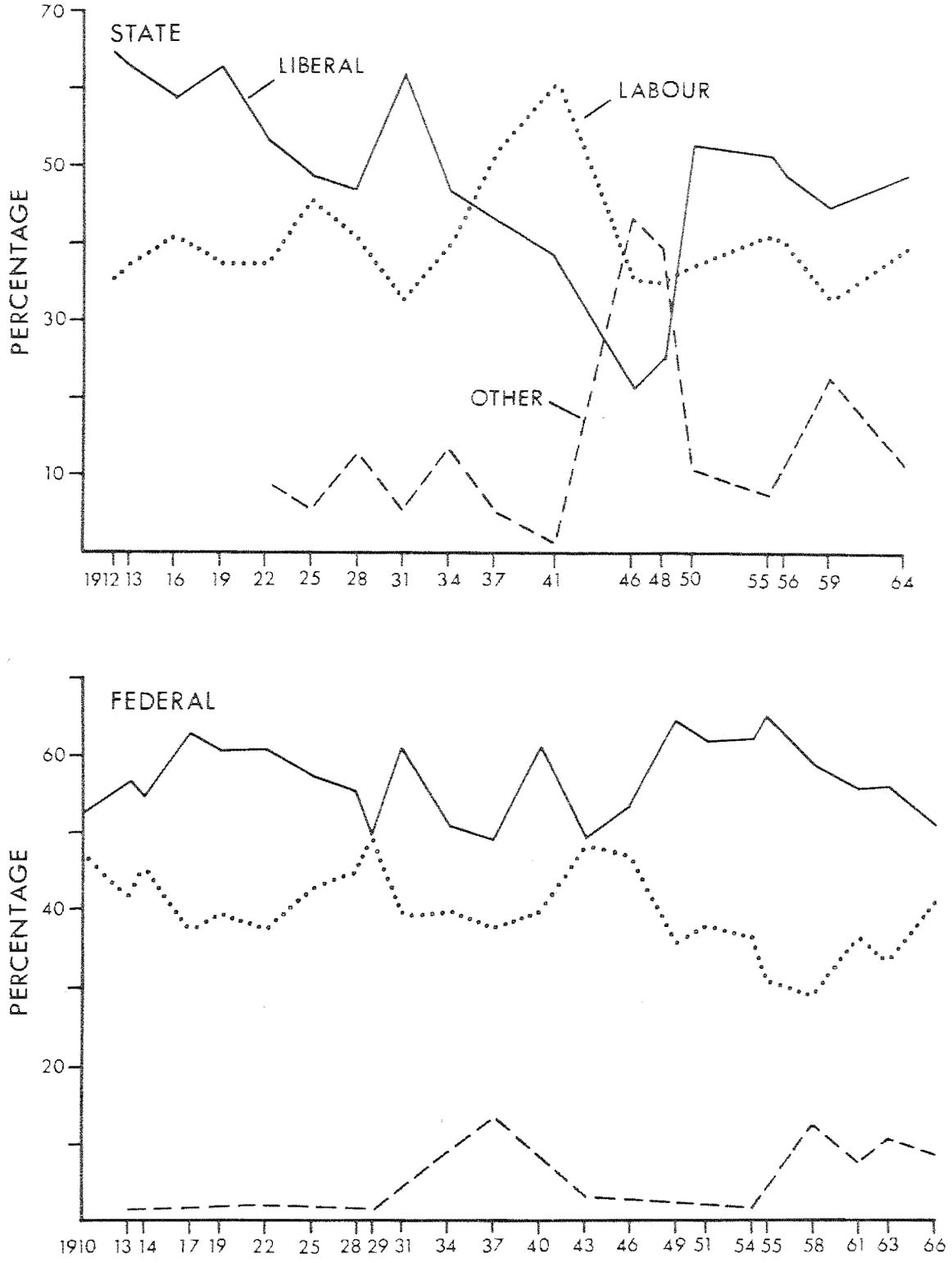

Fig. 18.5 State and Federal political affiliation in the New Town subdivision, 1910-1966 (Electoral Returns).

1931 to about ten percent since 1950. Between 1934 and 1950 four straight elections favoured Labour over Liberal, but in 1946 and 1948 both major parties were headed by the independent candidates, after which the Liberal leanings of the area were reasserted. New Town was already losing the status of Hobart's premier suburb by the 1930s, which linked to post-depression Labour resurgence and post-war independent strength to change the established pattern of allegiance. At the Federal level none of these forces singly or in combination was able to shake the area's anti-Labour allegiance (reflecting private enterprise interest in matters of trade and external affairs), although in 1929 and 1943 the Liberal margin was minimal. As State Liberal support waned from more than 60 percent to less than 50 percent of the total vote with the subdividing of New Town's large allotments and large houses for closer settlement and flat development, so the Nelson area has consistently increased its Liberal identification since the subdivision's delineation in 1922. Beginning with only 36 percent of the 1925 State vote Liberal support rose to 52 percent at the 1928 election, and only during the 1941, 1946 and 1948 elections has it ever since fallen below that level. The universal pro-Labour vote of 1941 actually saw a one percent Liberal deficit in Nelson, but by 1950 the socio-economic character of the area was firmly established and the Liberal vote topped 70 percent. By 1956 it reached almost 72 percent, at about which time Federal candidates were commanding 80 percent Liberal support, making Nelson the only subdivision in the State where the Liberal vote was comparable with the strength of Labour in Moonah or the mining areas of the Fingal valley and the West Coast.

The contiguous subdivisions of West Hobart, South Hobart (Figure 18.6) and Queenborough are actually or potentially more swinging than those to their north and south which have established general association with one political way of life rather than another (for much of the time, the other). Queenborough and South Hobart take in the areas on either side of the Sandy Bay Rivulet and thus the suburbs of South Hobart, Dynnyrne, Battery Point and Sandy Bay (excluding the newer,

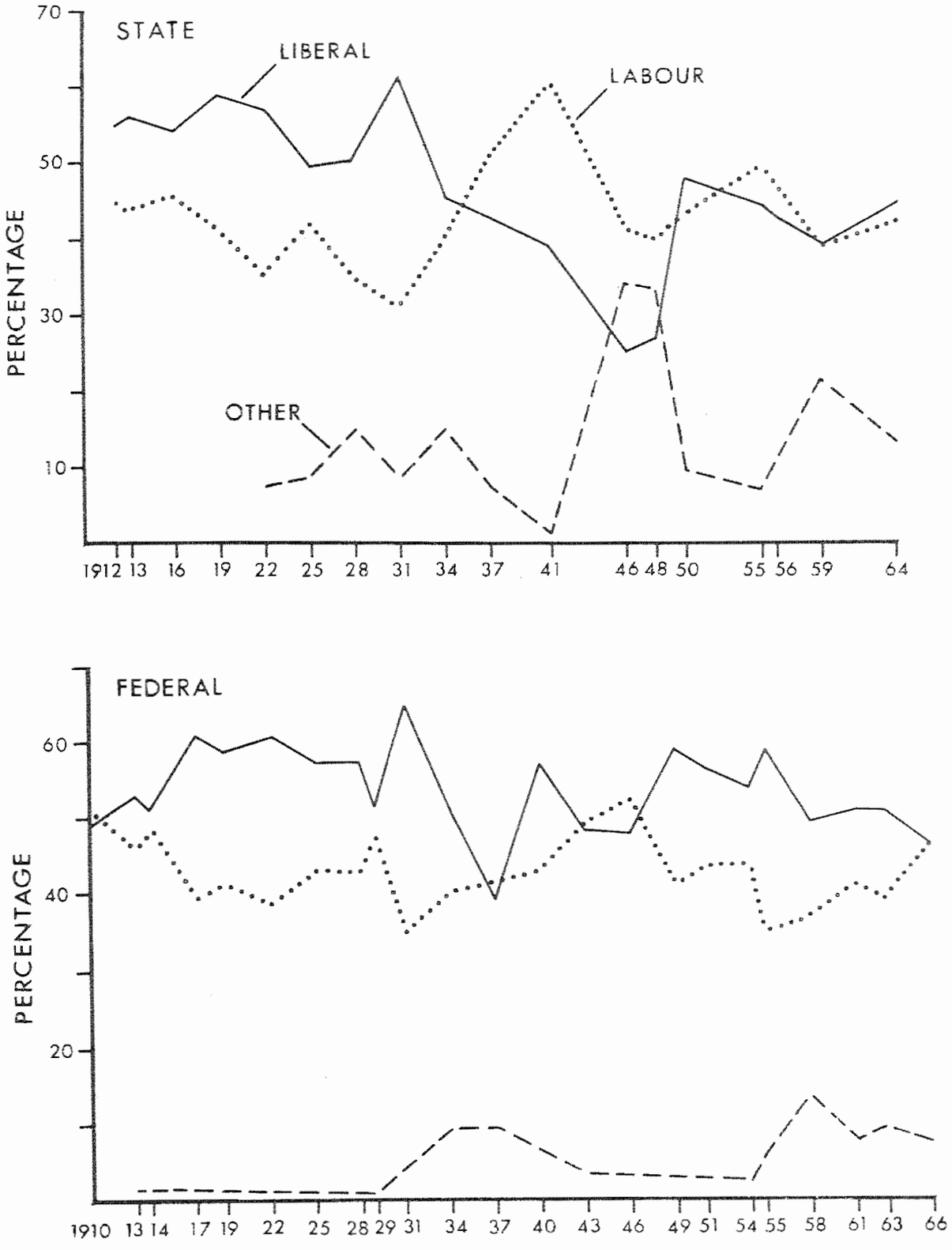

Fig. 18.6 State and Federal political affiliation in the South Hobart subdivision, 1910-1966 (Electoral Returns).

higher-status area of Lower Sandy Bay in Nelson subdivision). The voting trends of the two subdivisions have been very similar, with Queenborough showing slightly stronger Liberal support. Both areas were quite distinctly Liberal-affiliated until the 1930s, but since the 1934 election party fortunes have fluctuated with Labour having rather the better of the running in South Hobart. The residential and functional character of these areas is now quite well known, but it can be recalled that both have included several residential strata, mainly in the medium range, and both incorporate some commercial development. In Queenborough this has been largely concentrated in the growing Sandy Bay shopping centre; in South Hobart the infusion has been more sporadic, with pockets of commercialism along Macquarie Street, and with industrial elements scattered through the attenuated and largely interfluve area from Battery Point to the valley of the Hobart Rivulet west of the city centre.

The trend lines of main party voting in West Hobart are almost identical with those of South Hobart except that their relative strengths are transposed. Thus the same decline in Liberal support which gave Labour the ascendancy in South Hobart from 1937 to 1948 merely increased Labour's lead in West Hobart. Having failed only once (in 1931) to provide a Labour majority it might be thought that West Hobart could be equally classed with North Hobart, whose graph is very similar. However, while displaying greater 'purity' of Labour allegiance than North Hobart, the West Hobart support has been weakening at the State level and at the Federal level has allowed a Liberal ascendancy for most of the post-war period. The area has been consistently associated with low to medium value housing, and while subject to some functional modification where it adjoins the city centre is possibly less vulnerable to transition zone conversion than the North Hobart subdivision. As there are difficulties in comparing the consistency of and the variations among several area-affiliations in visual form, and more so in appraising the relationship between State and Federal allegiance (discussed in Chapter 13) a statistical measure of these expressions of public attitude has

been made.

Pearsonian Correlation: State, Federal, and State-Federal

In order to test the consistency of area-affiliation with the major political parties in and between both lower Houses of Parliament, 17 State and 17 Federal elections were selected. Where possible, elections held in the same year were chosen, and this could be done at three-yearly intervals for nine elections from 1913 to 1937 inclusive. The extension of the Tasmanian Parliamentary term to five years and other variations in election frequency caused the State and Federal elections to be out of phase after 1937, and so a further seven election pairs were chosen with the same or consecutive years, and a final pairing was made of the two most recent elections -- 1964 State and 1966 Federal.[15]

Considering first the relationship of the Denison subdivisions with one another in House of Assembly elections, Table 18.F shows Labour and Liberal voting in the Hobart subdivision correlated (separately) with the record of affiliation in the others.

Table 18.F

Correlation of Denison Subdivisions for House of Assembly 1913-1964

Subdivision	Liberal	Labour	Subdivision	Liberal	Labour
North Hobart	.981	.941	New Town	.949	.716
South Hobart	.937	.863	Moonah	-.481	.410
West Hobart	.923	.676	Nelson	-.594	.447
Queenborough	.942	.629	Hobart	1.000	1.000

Source: Electoral Returns, House of Assembly Journals and Pearsonian Correlation with 2N-Variable Matrices programmed for Elliott 503 computer

In view of the length of time encompassed by the electoral results

15 Elections selected, State and Federal, respectively: 1913, 1913; 1916, 1916; 1919, 1919; 1922, 1922; 1925, 1925; 1928, 1928; 1931, 1931; 1934, 1934; 1937, 1937; 1941, 1940; 1946, 1946; 1948, 1949; 1950, 1951; 1955, 1955; 1959, 1958; 1964, 1963; 1964, 1966.

used, the generally high level of consistency is striking.[16] The Liberal vote shows a quite remarkable degree of correlation at a very high level of significance for the five older subdivisions. Moonah and Nelson, having only existed from 1925 in State elections and having voted for Franklin candidates until 1955, are clearly at variance with the pattern of affiliation in Hobart subdivision, which has been taken as the yardstick. The lower Labour than Liberal voting consistency is rather unexpected as the Labour vote is normally regarded as more regimented than the Liberal. Apart from North Hobart's highest correlation with Hobart subdivision, which it most resembles in structure, there is no clear explanation for the variations among the other subdivisional correlations, although all (except Moonah and Nelson) are at the one percent level of significance or better.

Table 18.G

Correlation of Denison Subdivisions for House of Representatives 1913-1966

Subdivision	Liberal	Labour	Subdivision	Liberal	Labour
North Hobart	.913	.934	New Town	.809	.890
South Hobart	.721	.765	Moonah	-.125	-.034
West Hobart	.759	.871	Nelson	-.161	.230
Queenborough	.810	.707	Hobart	1.000	1.000

Source: Electoral Returns, Parliamentary Papers, and correlation as in Table 18.F

House of Representatives electoral results show general similarity of correlation with the Assembly pattern, but significant differences in detail (Table 18.G). All except Moonah and Nelson are above the 99.9 percent probability level for both parties. The rather higher Labour correlations in all but one subdivision probably reflect long-standing party attitudes in Federal matters, which may be interpreted as consistent or inflexible according to one's point

16 The percentage probability levels are as follows:
0.1 percent: .695 5 percent: .456
1.0 percent: .575 10 percent: .389

of view, while the Liberal voter's relationship to national issues may be seen as more adaptable or less principled for the same reason. That the Representatives correlations should be lower than those for the Assembly is indicative of more potent (but probably less understood) national than local issues. Differences among the subdivisions have more pattern here, with the three areas regarded as transitional (South Hobart, West Hobart and Queenborough) showing less consistency with the Hobart model than the more heavily committed New Town and North Hobart areas.

Remembering the persistent pro-Labour differential at State level which was examined in Chapter 13, high correlations cannot be expected in comparing each subdivision's State performance with its own Federal voting record. And so it works out (Table 18.H).

Table 18.H

Correlation of State and Federal Voting
for Denison Subdivisions 1913-1966

Subdivision	Liberal	Labour	Subdivision	Liberal	Labour
Hobart	.496	-.275	Queenborough	.445	.104
North Hobart	.464	.373	New Town	.179	-.174
South Hobart	.490	.087	Moonah	.845	.240
West Hobart	.189	-.108	Nelson	.890	.118

Source: As for Tables 18.F and 18.G

Although correlations around and below the 5 percent level of significance are not good, there is a marked contrast between the two parties in State-Federal consistency of allegiance. Profiting by their shorter history Moonah and Nelson, the one markedly Labour-affiliated the other even more clearly Liberal, display remarkably high consistency of Liberal electoral performance. The attainment of correlations between 0.4 and 0.5 for more than 50 years' voting in four other subdivisions is better than anticipated, though why West Hobart and New Town should be so much below this level is by no means clear. None of the Labour figures reaches the 10 percent level of significance, so only one point can reliably be made: that

the post-Federation Labour vote in Denison subdivisions bears little similarity in its State and Federal expressions. Perhaps the correlation of electoral results for a shorter period would indicate rather greater transferability of issues and policies, if not of candidates; though the shorter the period the less it will reflect the extent of change in community attitudes and affiliation.

References Chapter 18

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Conclusion: Hobart and Urban Evolution

In 1800 there were 56 towns in the world with 100,000 people each and they accounted for two percent of the world's population. In 1962 towns of 100,000 or more population exceeded 900 and housed 12 percent of the world's people. Hobart is one of these, in a national context where about 60 percent of the Australian population lives in seven cities of 100,000 of which Hobart is the smallest. Even so, almost half Tasmania's population increase of this century has been absorbed by its capital, causing changes in function, in structure and to fabric which can be investigated to good purpose. If Hobart is the least dominant of the State capitals it nevertheless exemplifies the metropolitan dominance concept of cities performing administrative, processing, marketing, and transfer functions for surrounding regions, thereby dominating the economy and organisation of those regions.[1]

In Commager's assessment America was the first made nation; all previous ones grew. Cities illustrate both these experiences. Most inevitably grew, and continue to grow, some so complexly as to be almost beyond analysis and direction. All were made, in the sense that the most fundamental concept of the city is the transformation of the landscape which it represents, and the transforming structures embody non-residential functions which no rural community concentrates on one site. If during the second half of the nineteenth century Hobart was "unable to bloat itself like the other Australian capitals"[2], not only because its hinterland was then stagnant, but also because the limitations of insularity, both internal and external, were beginning to materialise, it ensured a modest capital with which a single investigator could hope to get to grips.

It is a truism that some things are more transient than others, but while the people of Sprent's Hobart are gone and their descendants

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1 D.J. Bogue: The Structure of the Metropolitan Community, Ann Arbor, 1949

2 G. Blainey: Population movements in Tasmania, 1870-1901, P. & P. Tas. Hist. Res. Assn. 3, 1954, p.69

are significantly more numerous than they, some of the structures remain and some early planning is embodied in present spatial patterns. Changes in functions, in values, and in form modify the past, but at the same time show that the present is in no small measure shaped by it. This study has attempted by geographical analysis of mainly historical data to interpret the course of Hobart's evolution and hopefully to throw additional light on the elements and processes of urbanisation.

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
1 *(1)	140														140
(2)	4														4
(3)	35.0														35.0
(4)	100.0														.138
2	24														24
	1														1
	24.0														24.0
	100.0														.024
3	105														105
	5														5
	21.0														21.0
	100.0														.103
4	48														48
	4														4
	12.0														12.0
	100.0														.047

Lines * 1 - total value; 2 - number; 3 - average value; 4 - percentage of total block value; last column - percentage of area value

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
5	58														58
	4														4
	14.5														14.5
	100.0														.057
6	30														30
	3														3
	10.0														10.0
	100.0														.030
7	133														133
	11														11
	12.1														12.1
	100.0														.131
8	20														20
	1														1
	20.0														20.0
	100.0														.020

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
9	134	18				18									152
	10	1				1									11
	13.4	18.0				18.0									13.8
	88.2	11.8				11.8									.150
10	123	24		40		64									187
	7	1		1		2									9
	17.6	24.0		40.0		32.0									20.8
	65.8	12.8		21.4		34.2									.184
11	275														275
	17														17
	16.2														16.2
	100.0														.271
12	564	41		100		141									705
	52	2		2		4									56
	10.8	20.5		50.0		35.3									12.6
	80.0	5.8		14.2		20.0									.695

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
13	142														142
	11														11
	12.9														12.9
	100.0														.140
14	192														192
	12														12
	16.0														16.0
	100.0														.189
15	502	40		102		142									644
	30	1		2		3									33
	16.7	40.0		51.0		47.3									19.5
	78.0	6.2		15.8		22.0									.634
16	155														155
	5														5
	31.0														31.0
	100.0														.153

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
17	249	10				10		350							609
	6	1				1		3							10
	41.5	10.0				10.0		116.6							60.9
	40.9	1.6				1.6		57.5							.600
18	770	47				47									817
	34	2				2									36
	22.6	23.5				23.5									22.7
	94.2	5.8				5.8									.805
19	1108	83		200		283				10					1401
	56	4		3		7				1					64
	19.8	20.7		66.6		40.4				10.0					21.9
	79.1	5.9		14.3		20.2				0.7					1.380
20	1562														1562
	40														40
	39.1														39.1
	100.0														1.540

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
21	1377	19		50		69									1446
	38	2		1		3									41
	36.2	9.5		50.0		23.0									35.3
	95.2	1.3		3.5		4.8									1.425
22	771														771
	16														16
	48.2														48.2
	100.0														.760
23	222														222
	5														5
	44.4														44.4
	100.0														.220
24	350			120		120									470
	18			1		1									19
	19.4			120.0		120.0									24.7
	74.5			25.5		25.5									.463

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
25	NIL														
26	31														31
	3														3
	10.3														10.3
	100.0														.031
27	49														49
	3														3
	16.3														16.3
	100.0														.048
28	20														20
	1														1
	20.0														20.0
	100.0														.020
29	401	16		25		41									442
	33	2		1		3									36
	12.2	8.0		25.0		13.7									12.3
	90.7	3.6		5.7		9.3									.435

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
30	56			30		30									86
	4			1		1									5
	14.0			30.0		30.0									17.2
	65.1			34.9		34.9									.084
31	27	10				10									37
	3	1				1									4
	9.0	10.0				10.0									9.25
	73.0	27.0				27.0									.036
32	232			48		48		35							315
	17			1		1		1							19
	13.6			48.0		48.0		35.0							16.6
	73.7			15.2		15.2		11.1							.310
33	322	8				8				18					348
	19	1				1				1					21
	16.9	8.0				8.0				18.0					16.6
	92.5	2.3				2.3				5.2					.343

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
34	430	49		45		94									524
	36	2		1		3									39
	11.9	24.5		45.0		31.3									13.4
	82.1	9.4		8.6		18.0									.516
35	584	159		170		329									913
	39	6		3		9									48
	14.9	26.5		56.6		36.6									19.02
	64.0	17.5		18.5		36.0									.900
36	700	67		60		127				10					837
	47	3		1		4				1					52
	14.9	22.3		60.0		31.8				10.0					16.09
	83.6	8.0		7.2		15.2				1.2					.825
37	372						45	620							1037
	9						1	4							14
	41.3						45.0	155.0							74.07
	35.9						4.3	59.8							1.02

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
38	748	88		100		188		100							1036
	17	3		1		4		1							22
	44.0	29.3		100.0		47.0		100.0							47.09
	72.2	8.5		9.7		18.1		9.7							1.02
39										500					500
										1					1
										500.0					500.0
										100.0					.492
40	206	4		40		44									250
	20	1		1		2									22
	10.3	4.0		40.0		22.0									11.7
	82.4	1.6		16.0		17.6									.246
41	168									30					198
	9									2					11
	18.7									15.0					18.0
	84.8									15.2					.195

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
42	NIL														
43	391	48		25		73									464
	29	2		1		3									32
	13.5	24.0		25.0		24.3									14.5
	84.3	10.3		5.4		15.7									.457
44	517	14		50		64		45							626
	39	2		1		3		1							43
	13.3	7.0		50.0		21.3		45.0							14.4
	82.6	2.2		8.0		10.2		7.2							.617
45	437	26		172		198									635
	37	2		4		6									43
	11.8	13.0		43.0		33.0									14.8
	68.8	4.1		27.1		31.2									.626
46	709	418		470		888		15							1612
	50	25		8		33		1							84
	14.2	16.7		58.7		26.9		15.0							19.2
	44.0	25.9		29.2		55.1		0.9							1.586

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
47	1328	391		200		591		120							2039
	55	23		3		26		1							82
	24.1	17.0		66.6		22.7		120.0							24.9
	65.1	19.2		9.8		29.0		5.9							2.019
48	620				20	20	40			35					715
	10				1	1	1			1					13
	62.0				20.0	20.0	40.0			35.0					55.0
	86.7				2.8	2.8	5.6			4.9					.705
49	765	257		300		557							21		1343
	19	6		4		10							1		30
	40.2	42.8		75		55.7							21.0		44.8
	57.0	19.1		22.3		41.4							1.6		1.323
50	82														82
	4														4
	20.5														20.5
	100.0														.081

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
51	305														305
	10														10
	30.5														30.5
	100.0														.300
52	340														340
	4														4
	85.0														85.0
	100.0														.335
53	361	70	1815	380		2265	115	30							2771
	9	1	13	2		16	2	1							28
	40.1	70.0	139.6	190.0		141.6	57.5	30.0							98.9
	13.0	2.5	65.5	13.7		81.7	4.2	1.1							2.731
54	NIL														
55	467							30							497
	16							1							17
	29.2							30.0							29.2
	94.0							6.0							.490

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
56	315	40				40									355
	7	1				1									8
	45.0	40.0				40.0									44.4
	88.7	11.3				11.3									.350
57	NIL														
58	522	31	820	100		951				25					1498
	20	1	6	1		8				1					29
	26.1	31.0	136.7	100.0		118.9				25.0					51.6
	34.8	2.1	54.7	6.7		63.5				1.7					1.476
59	142														142
	6														6
	23.7														23.7
	100.0														.140
60	212			45		45									257
	11			1		1									12
	19.3			45.0		45.0									21.4
	82.5			17.5		17.5									.253

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
61	198														198
	3														3
	66.0														66.0
	100.0														.195
62	375	60				60		120							555
	8	2				2		2							12
	46.8	30.0				30.0		60.0							46.25
	67.6	10.8				10.8		21.6							.547
63	88														88
	10														10
	8.8														8.8
	100.0														.086
64	456	30		147		177									633
	36	3		3		6									42
	12.7	10.0		49		29.5									15.07
	72.0	4.7		23.2		28.0									.624

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX 1

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
65	595	37		85		122				25					742
	41	2		2		4				1					46
	14.5	18.5		42.5		30.5				25.0					16.13
	80.2	5.0		11.5		16.4				3.4					.731
66	478	59		45		104									582
	19	3		1		4									23
	25.1	19.6		45.0		26									25.3
	82.1	10.1		7.7		17.9									.573
67	672	69		100		169		26		10					877
	41	5		2		7		1		1					50
	16.3	13.8		50.0		24.1		26.0		10.0					17.5
	76.6	7.9		11.4		19.3		3.0		1.1					.864
68	1712	792		325		1117									2829
	77	31		5		36									113
	22.2	25.5		65.0		31.0									25.03
	60.5	28.0		11.5		39.5									2.79

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
69	1187	993	25	530	200	1748		126	42						3103
	64	38	1	6	1	46		2	1						113
	18.6	26.1	25.0	88.3	200.0	38.0		63.0	42.0						27.45
	38.3	32.0	0.8	17.1	6.4	56.3		4.1	1.4						3.058
70	735	729	50	355	225	1359	695								2789
	18	15	1	3	1	20	17								55
	40.8	48.6	50.0	118.3	225.0	67.9	40.8								50.7
	26.4	26.1	1.8	12.7	8.1	48.7	24.9								2.748
71	790	50	50		300	400	185	250		380			46		2051
	10	1	1		2	4	5	1		2			2		24
	79.0	50.0	50.0		150.0	100.0	37.0	250		190.0			23.0		85.45
	38.5	2.4	2.4		14.6	19.5	9.0	12.2		18.5			2.2		2.021
72			306			306				200					506
			3			3				1					4
			103.0			103.0				200.1					126.5
			60.5			60.5				39.5					.499

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
73	58		70	230		300				400					758
	2		1	2		3				1					6
	29.0		70.0	115.0		100.0				400.0					126.3
	7.7		9.2	30.3		39.5				52.8					.747
74	80		585	530		1115				300					1495
	1		4	3		7				1					9
	80.0		146.3	176.7		159.3				300.0					166.1
	5.4		39.1	35.5		74.6				20.1					1.473
75	NIL														
76								30		30					60
								1		1					2
								30.0		30.0					30.0
								50.0		50.0					.059
77	95			60		60		139							294
	5			1		1		2							8
	19.0			60.0		60.0		69.5							36.75
	32.3			20.4		20.4		47.3							.290

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
78	459	28		52		80									539
	35	2		1		3									38
	13.1	14.0		52.0		26.6									14.2
	85.2	5.2		9.6		14.8									.531
79	829	49		50		99									929
	43	3		1		4									47
	19.3	16.3		50.0		24.8									19.8
	89.2	5.3		5.4		10.7									.916
80	593	66				66									659
	34	4				4									38
	17.4	16.5				16.5									17.3
	90.0	10.0				10.0									.650
81	520	263		275		538									1058
	24	15		5		20									44
	21.6	17.5		55.0		26.9									24.04
	49.1	24.9		26.0		50.9									1.043

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
82	765	323		240		563									1328
	40	18		3		21									61
	19.1	17.9		80.0		26.8									21.8
	57.6	24.3		18.1		42.4									1.309
83	1069	797		210		1007			60						2136
	41	26		2		28			1						70
	26.0	30.6		105.0		36.0			60.0						30.5
	50.1	37.3		9.8		47.1			2.8						2.105
84	1915	1868	70	570		2508		35		40					4497
	47	29	1	4		34		1		1					83
	40.7	64.4	70.0	142.5		73.8		35.0		40.0					54.2
	42.6	41.6	1.6	12.7		55.7		0.8		0.9					4.432
85	2069	2173	65	730		2968	200								5242
	71	45	4	5		54	1								126
	29.1	48.3	16.2	14.6		55.0	200.0								41.6
	39.5	41.5	1.2	13.9		56.6	3.8								5.166

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
86	782	643	540	330	150	1663	40			235					2720
	25	16	5	4	1	26	1			2					54
	31.3	40.2	108.0	82.5	150.0	64.0	40.0			117.5					50.4
	28.9	23.6	19.9	12.1	5.5	61.1	1.5			8.6					2.681
87										1050					1050
										4					4
										262.5					262.5
										100.0					1.034
88		40		470		510									510
		1		3		4									4
		40.0		156.7		127.5									127.5
		7.8		92.2		100.0									.502
89	163	13		115		128									291
	11	1		2		3									14
	14.8	13.0		57.5		42.6									20.8
	56.0	4.5		39.5		44.0									.287

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
90	476	64				64									540
	32	4				4									36
	14.9	16.0				16.0									15.0
	88.1	11.9				11.9									.532
91	648	24		40		64									712
	23	2		1		3									26
	28.2	12.0		40.0		21.3									27.4
	91.0	3.4		5.6		9.0									.701
92	649	13		40		53		55							757
	41	1		1		2		1							44
	15.8	13.0		40.0		26.5		55.0							17.2
	85.7	1.7		5.3		7.0		7.3							.746
93	327	93				93									420
	13	5				5									18
	25.1	18.6				18.6									23.3
	77.9	22.1				22.1									.414

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
94	NIL														
95	282	63		60		123									405
	20	7		1		8									28
	14.1	9.0		60.0		15.4									14.5
	69.6	15.6		14.8		30.4									.400
96	1484			60		60									1544
	42			1		1									43
	35.3			60.0		60.0									35.9
	96.1			3.9		3.9									1.521
97	1378	209		400		609									1987
	57	11		4		15									72
	24.1	19.0		100.0		40.6									27.6
	69.4	10.5		20.1		30.6									1.960
98	1100	468		120		588			30						1718
	55	19		1		20			1						76
	20.0	24.6		120.0		29.4			30.0						22.6
	64.0	27.2		7.0		34.2			1.8						1.693

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
99	1419	1019	50	800		1869									3285
	52	32	1	7		39									91
	27.2	31.8	50.0	114.2		47.9									36.1
	43.2	31.0	1.5	24.4		56.9									3.237
100	1631	1377	750			2127		25							3783
	47	36	5			41		1							89
	34.7	38.2	150.0			51.9		25.0							42.5
	43.1	36.4	19.8			56.2		0.7							3.728
101	825	589				589	145			180					1739
	17	9				9	3			2					31
	48.5	65.4				65.4	48.3			90.0					56.09
	47.4	33.9				33.9	8.3			10.4					1.713
102	1163	36		80		116									1279
	64	3		2		5									69
	18.2	12.0		40.0		23.2									18.54
	90.9	2.8		6.3		9.1									1.260

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
103	644	32		80		112									756
	42	3		1		4									46
	15.3	10.6		80.0		28.0									16.4
	85.2	4.2		10.6		14.8									.745
104	652	57		214		271									923
	25	4		4		8									33
	26.1	14.2		53.5		33.9									27.96
	70.6	6.2		23.2		29.4									.909
105	607	10		170		180	80			500					1367
	23	1		2		3	1			1					28
	26.3	10.0		85.0		60.0	80.0			500.0					48.8
	44.4	0.7		12.4		13.1	5.9			36.6					1.350
106	408	50	150			200				70					678
	16	4	1			5				1					22
	25.5	12.5	150.0			40.0				70.0					30.8
	60.2	7.4	22.1			29.5				10.3					.668

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
107	797	169		190		359				300					1454
	40	10		2		12				1					53
	19.9	16.9		95.0		29.9				300.0					27.4
	54.8	11.6		13.1		24.7				20.6					1.433
108	428	416		300	150	866		85							1379
	24	15		3	1	19		1							44
	17.8	27.7		100.0	150.0	45.6		85.0							31.3
	31.0	30.2		21.8	10.9	62.8		6.2							1.359
109	40		250			250									290
	1		1			1									2
	400		250.0			250.0									145.0
	13.8		86.2			86.2									.286
110	76	81				81		100		120					377
	4	3				3		1		1					9
	19.0	27.0				27.0		100.0		120.0					41.9
	20.2	21.5				21.5		26.5		31.8					.372

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
111	506	20				20									526
	27	1				1									28
	18.7	20.0				20.0									18.8
	96.2	3.8				3.8									.518
112	489	30	20			50									539
	19	2	1			3									22
	25.7	15.0	20.0			16.6									24.5
	90.7	5.6	3.7			9.3									.531
113	585														585
	10														10
	58.5														58.5
	100.0														.577
114	1000	39		400		439		20	150	70					1679
	52	3		4		7		1	1	1					62
	19.2	13.0		100.0		62.7		20.0	150.0	70.0					27.08
	59.6	2.3		23.8		26.1		1.2	8.9	4.2					1.655

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1847

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
115	571	172		402		574		145							1290
	37	4		6		10		2							49
	15.4	43.0		67.0		57.4		72.5							26.3
	44.3	13.4		31.2		44.5		11.2							1.271
116	186	211	1147	235		1593		290		250					2319
	8	6	18	4		28		1		1					38
	23.3	35.2	63.7	58.8		56.9		290.0		250.0					61.04
	8.0	9.1	49.5	10.1		68.7		12.5		10.8					2.85
1-116	55,967	16,302	6013	12,662	1045	36,022	1545	2791	282	4788	nil	nil	67	nil	101,462
(110 with values)	2,473	541	62	152	7	762	932	32	4	31			3		3,337
	22.6	30.1	97.0	83.3	149.3	47.3	48.3	87.2	70.5	154.5			22.3		30.5
	55.10	16.07	5.93	12.5	1.03	35.53	1.52	2.75	0.27	4.72			0.066		99.986

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
1 (1)	205													20	225
(2)	9													4	13
(3)	22.8													5.0	17.3
(4)	91.1													8.9	.135
2	365							10							375
	14							1							15
	26.1							10.0							25.0
	97.3							2.7							.226
3	516	6				6								6	528
	24	1				1								2	27
	21.5	6.0				6.0								3.0	19.5
	97.7	1.1				1.1								1.1	.318
4	633							11						21	665
	32							1						5	38
	19.8							11.0						4.2	17.5
	95.2							1.7						3.1	.401

Linea: 1 - total value; 2 - number; 3 - average value; 4 - percentage of total block value; last column - percentage area total

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
5	854	9				9							3	20	886
	47	1				1							1	3	52
	18.2	9.0				9.0							3.0	6.7	17.03
	96.4	1.0				1.0							0.3	2.3	.534
6	711								50					47	808
	36								1					7	44
	19.8								50.0					6.7	18.3
	88.0								6.2					5.8	.487
7	464													41	505
	19													5	24
	24.4													8.2	21.04
	91.9													8.1	.304
8	121													11	132
	5													2	7
	24.2													5.5	18.9
	91.7													8.3	.079

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
9	410													4	414
	17													1	18
	24.1													4.0	23.00
	99.0													1.0	.249
10	507							16							523
	24							1							25
	21.1							16.0							20.9
	96.9							3.1							.315
11	314			30		30				30				16	390
	20			1		1				1				3	25
	15.7			30.0		30.0				30.0				5.3	15.6
	80.5			7.7		7.7				7.7				4.1	.235
12	1085	9				9		10						5	1109
	60	1				1		1						1	63
	18.1	9.0				9.0		10.0						5.0	17.6
	97.8	0.8				0.8		0.9						0.5	.669

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
13	558	15				15								18	591
	25	1				1								2	28
	22.3	15.0				15.0								9.0	21.1
	94.4	2.5				2.5								3.1	.356
14	881							12						9	902
	31							1						1	33
	28.4							12.0						9.0	27.3
	97.7							1.3						1.0	.544
15	719	11				11									730
	36	1				1									37
	20.0	11.0				11.0									19.7
	98.5	1.5				1.5									.440
16	57													15	72
	2													1	3
	28.5													15.0	24.0
	79.2													20.8	.043

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
17	349	56				56		70		24				3	502
	16	4				4		1		1				1	23
	21.8	14.0				14.0		70.0		24.0				3.0	21.8
	69.5	11.2				11.2		13.9		4.8				0.6	.302
18	1677	123		50		173		386						23	2229
	64	7		1		8		3						2	77
	26.2	17.6		50.0		21.6		118.7						11.5	29.0
	75.2	5.5		2.2		7.8		16.0						1.0	1.344
19	1488	18		85		103			41	6					1638
	74	2		2		4			2	1					81
	20.1	9.0		42.5		25.8			20.5	6.0					20.2
	90.8	1.1		5.2		6.3			2.5	0.4					.988
20	1703	26				26									1729
	43	1				1									44
	39.6	26.0				26.0									39.3
	98.5	1.5				1.5									1.043

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
21	1500	12				12							6	15	1533
	35	1				1							1	1	38
	42.9	12.0				12.0							6.0	15.0	40.3
	97.9	0.8				0.8							0.4	1.0	.924
22	1439	26		80		106		40						38	1623
	24	1		1		2		1						3	31
	60	26.0		80.0		53.0		40.0						9.5	52.4
	88.7	1.6		4.9		6.5		2.5						2.3	.979
23	361													5	366
	6													2	8
	60.0													2.5	45.75
	98.6													1.4	.220
24	1030													48	1078
	55													4	39
	29.4													12.0	27.6
	95.5													4.5	.650

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
25	54									30					84
	2									1					3
	27.0									30.0					28.0
	64.3									35.7					.050
26	517	13				13								20	550
	25	1				1								2	28
	20.7	13.0				13.0								10.0	19.6
	94.0	2.4				2.4								3.6	.152
27	422	25				25								2	449
	20	2				2								1	23
	21.1	12.5				12.5								2.0	19.5
	94.0	5.6				5.6								0.4	.270
28	357												12	99	468
	16												1	2	19
	22.3												12.0	49.5	24.6
	76.2												2.6	21.2	.282

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
29	1295	18		40		58		18						29	1400
	65	2		1		3		1						9	78
	19.9	9.0		40.0		19.3		18.0						3.2	17.9
	92.5	1.3		2.9		4.1		1.3						2.0	.844
30	294			70		70							10	14	388
	12			1		1							1	4	18
	24.5			70.0		70.0							10.0	3.5	21.6
	75.8			18.0		18.0							2.6	3.6	.234
31	235	9				9		9							253
	12	1				1		1							14
	19.6	9.0				9.0		9.0							18.1
	92.9	3.6				3.6		3.6							.152
32	766													15	781
	30													4	34
	25.5													3.8	22.97
	98.1													1.9	.471

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
33	813													3	816
	35													1	36
	23.2													3.0	22.7
	99.6													0.4	.492
34	762	39		60		99								7	868
	42	4		1		5								2	49
	18.1	9.8		60.0		19.8								3.5	17.7
	87.8	4.5		6.9		11.4								0.8	.523
35	1107	63		100		163		15					18	9	1312
	77	4		1		5		1					1	3	87
	14.4	15.8		100.0		32.6		15.0					18.0	3.0	15.08
	84.4	4.8		7.6		12.4		1.1					1.4	0.7	.791
36	1139	50		114		164		14		9				3	1329
	69	5		2		7		1		1				1	79
	16.5	10.0		57.0		23.4		14.0		9.0				3.0	16.8
	85.7	3.8		8.6		12.3		1.1		0.7				0.2	.801

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX I

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
37	555							450						16	1021
	11							4						1	16
	50.5							112.5						16.0	63.8
	54.5							44.1						1.5	.615
38	1018	101				101		60		120					1299
	23	4				4		1		1					29
	44.3	25.3				25.3		60.0		120.0					44.8
	78.4	7.8				7.8		4.6		9.2					.783
39	937							20		82				24	1063
	21							1		3				1	26
	44.6							20.0		27.3				24.0	40.9
	88.1							1.9		7.7				2.3	.641
40	2118													22	2140
	88													3	91
	24.1													7.3	23.5
	99.0													1.0	1.290

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
41	1137	17				17		25						7	1186
	49	1				1		1						2	53
	23.2	17.0				17.0		25.0						3.5	22.4
	95.9	1.4				1.4		2.1						0.6	.715
42	300									39				74	413
	3									2				3	8
	100.0									19.5				24.7	51.6
	72.6									9.4				17.9	.249
43	923	11				11		149						4	1089
	46	1				1		4						1	52
	20.1	11.0				11.0		37.3						4.0	20.9
	84.9	1.0				1.0		13.7						0.4	.656
44	1240			100		100				20				6	1366
	60			1		1				1				2	64
	20.7			100.0		100.0				20.0				3.0	21.3
	90.8			7.3		7.3				1.5				0.4	.824

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
45	702	55		46		101				26				15	844
	44	4		1		5				1				1	51
	16.0	13.8		46.0		20.2				26.0				15.0	16.5
	83.2	6.5		5.5		12.0				3.1				1.8	.509
46	712	251		249		500		11	38					22	1283
	46	21		3		24		1	1					2	74
	15.5	12.0		83.0		20.8		11.0	38.0					11.0	17.3
	55.5	19.6		19.4		39.0		0.9	2.9					1.7	.773
47	1106	429	134	93		656		240		11			24	20	2057
	54	25	4	1		30		5		1			1	3	94
	20.5	17.2	33.5	93.0		21.9		48.0		11.0			24.0	6.7	21.9
	53.8	20.9	6.5	4.5		31.9		11.7		0.5			1.2	0.9	1.242
48	752								105	125					982
	10								1	1					12
	75.2								105.0	125.0					81.8
	76.6								10.7	12.7					.592

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
49	1581	76		210		286		39		15					1921
	38	6		2		8		1		1					48
	41.6	12.7		105.0		35.8		39.0		15.0					40.02
	82.3	4.0		10.9		14.9		2.0		0.8					1.158
50	409														409
	11														11
	37.2														37.2
	100.0														.246
51	404							70		18					492
	9							1		1					11
	44.9							70.0		18.0					44.7
	82.1							14.2		3.7					.296
52	1256	16				16								35	1307
	30	1				1								3	34
	41.9	16.0				16.0								11.7	38.9
	96.1	1.2				1.2								2.7	.788

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
53	2089	166	135	132		433		549						21	3092
	82	6	3	2		11		5						3	101
	25.5	27.7	45.0	66.0		39.4		109.8						7.0	30.6
	67.6	5.2	4.4	4.3		14.0		17.8						0.7	1.865
54	860									15				9	884
	31									1				1	33
	27.7									15.0				9.0	26.8
	97.3									1.7				1.0	.533
55	877	11				11									888
	27	1				1									28
	32.5	11.0				11.0									31.7
	98.8	1.2				1.2									.535
56	526	28				28		12							566
	23	2				2		1							26
	22.9	14.0				14.0		12.0							21.8
	92.9	5.0				5.0		2.1							.341

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
57	275	15				15				15				12	317
	15	1				1				1				1	18
	18.3	15.0				15.0				15.0				12.0	17.6
	86.8	4.7				4.7				4.7				3.8	.191
58	2954	105	138	146		389		48	25					36	3452
	123	6	6	2		14		2	1					4	144
	24.0	17.5	23.0	73.0		27.8		24.0	25.0					9.0	23.97
	85.6	3.0	4.0	4.2		11.3		1.4	0.7					1.0	2.082
59	450													13	463
	17													2	19
	26.5													6.5	24.4
	97.2													2.8	.279
60	268			52		52								2	322
	14			1		1								1	16
	19.1			52.0		52.0								2.0	20.1
	83.2			16.2		16.2								0.6	.194

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
61	494		5			5		252						11	762
	22		1			1		5						2	30
	22.5		5.0			5.0		50.4						5.5	25.4
	64.8		0.7			0.7		33.1						1.4	.459
62	1396	16				16		125						64	1601
	30	11				1		3						5	39
	46.5	16.0				16.0		41.7						12.8	41.05
	87.2	1.0				1.0		7.8						4.0	.965
63	132	31				31								[illegible]	163
	12	2				2									14
	11.0	15.5				15.5									11.6
	81.0	19.0				19.0									.098
64	547	44		100		144							13	9	713
	34	3		2		5							1	3	43
	16.1	14.7		50.0		28.8							13.0	3.0	16.6
	76.7	6.2		14.0		20.2							1.8	1.3	.430

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
65	692	55		105		160		32		80					964
	43	5		2		7		2		1					53
	16.0	11.0		52.5		22		16.0		80.0					18.2
	71.8	5.7		10.9		16.6		3.3		8.3					.581
66	653	16		45		61	13	40							767
	29	1		1		2	1	2							34
	22.5	16.0		45.0		30.5	13.0	20.0							22.6
	85.1	2.1		5.9		8.0	1.7	5.2							.462
67	820	57				57		54						16	947
	52	6				6		3						2	63
	15.8	9.5				9.5		18.0						8.0	15.03
	86.6	6.0				6.0		5.7						1.7	.571
68	1733	1542	105	335		1982		53					42		3810
	60	40	1	3		44		2					3		109
	28.9	38.6	105.0	111.7		45.0		26.5					14.0		35.0
	45.5	40.5	2.8	8.8		52.0		1.4					1.1		2.298

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
69	1748	2026	175	705		2906	128	112					120		5014
	68	51	4	4		59	6	4					1		138
	25.7	39.7	43.8	176.2		49.2	21.3	28.0					120.0		36.3
	34.9	40.4	3.5	14.1		58.0	2.6	2.2					2.3		3.024
70	1652	494	50	670		1214	878	17	225	45					4031
	44	13	1	2		16	22	1	4	2					89
	37.6	38.0	50.0	335.0		75.9	39.9	17.0	56.2	22.5					45.3
	41.0	12.3	1.2	16.6		30.1	21.8	0.4	5.6	1.4					2.431
71	1349	130	326		120	576	539		710	45					3219
	24	2	6		1	9	7		4	1					45
	56.2	65.0	54.3		120.0	64.0	77.0		177.5	45.0					71.5
	41.9	4.0	10.1		3.7	17.9	16.7		22.1	1.4					1.941
72	422		390			390		152					10		974
	11		6			6		4					1		22
	38.4		65.0			65.0		38.0					10.0		44.3
	43.3		40.0			40.0		15.6					1.0		.587

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
73 & 75	65	100	100			200									265
	3	3	1			4									7
	21.7	33.3	100.0			50.0									37.9
	24.5	37.7	37.7			75.5									.159
74	610	48	272	52		372		30						9	1021
	25	2	10	1		13		1						1	40
	24.4	24.0	27.2	52.0		28.6		30.0						9.0	25.5
	59.8	4.7	26.6	5.1		36.4		2.9						0.9	.615
76			32			32								13	45
			2			2								1	3
			16.0			16.0								13.0	15.0
			71.1			71.1								28.9	.0271
77	1391	12	18			30				13				14	1448
	84	1	1			2				1				2	89
	16.6	12.0	18.0			15.0				13.0				7.0	16.3
	96.1	0.8	1.2			2.0				0.9				1.0	.873

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
78	778	49		45		94								8	880
	37	3		1		4								2	43
	21.0	16.3		45.0		23.5								4.0	20.5
	88.4	5.6		5.1		10.7								0.9	.530
79	1447	90		60		150		18		21				2	1638
	71	8		1		9		1		1				1	83
	20.4	11.3		60.0		16.7		18.0		21.0				2.0	19.7
	88.3	5.5		3.7		9.2		1.1		1.3				0.1	.988
80	867	141	14			155		42						12	1076
	50	9	1			10		5						2	67
	17.3	15.7	14.0			15.5		8.4						6.0	16.05
	80.6	13.1	1.3			14.4		3.9						1.1	.649
81	908	314	40	132		486		30		100					1524
	41	14	2	2		18		1		2					62
	22.2	22.4	20.0	66.0		27.0		30.0		50.0					24.6
	59.6	20.6	2.6	8.7		31.9		2.0		6.6					.919

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
82	739 42 17.6 59.2	251 14 17.9 20.1	15 1 15.0 1.2	80 1 80.0 6.4		346 16 21.6 27.7		160 3 53.3 12.8						3 1 3.0 0.2	1248 62 20.1 .752
83	1311 50 26.2 47.3	919 26 35.3 33.1		120 1 120.0 4.3		1039 27 38.5 37.4	35 1 35.0 1.3	65 3 21.7 2.3	293 3 97.7 10.6				14 1 14.0 0.5	17 2 8.5 0.6	2774 87 31.9 1.673
84	2036 42 48.5 33.4	2924 40 73.1 47.9	575 8 71.9 9.4	310 2 155.0 5.1		3809 50 76.2 62.4	125 2 62.5 2.0	84 3 28.0 1.4		36 1 36.0 0.6			11 1 11.0 0.2		6101 99 61.6 3.680
85	2152 34 63.3 20.3	4253 47 90.5 40.2	1391 12 115.9 13.1	960 4 240.0 9.1	400 1 400.0 3.8	7004 64 109.4 66.2	884 25 35.4 8.4	379 6 63.2 3.6	140 1 140.0 1.3				20 1 20.0 0.2	9 1 9.0 0.1	10.588 132 80.2 6.387

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
86	768	639	965	200	800	2604	2124	62					27	210	5795
	18	11	12	1	2	26	60	2					1	1	108
	42.7	58.1	80.4	200.0	400.0	100.2	35.4	31.0					27.0	210.0	53.7
	13.3	11.0	16.7	3.5	13.8	44.9	36.6	1.1					0.5	3.6	3.495
87	NIL														
88	298	353	194	300		847	187	887						44	2263
	14	15	5	3		23	9	6						2	54
	21.3	23.5	38.8	100.0		368	20.8	147.8						22.0	42.0
	13.2	15.6	8.6	13.3		37.4	8.3	39.2						1.9	1.365
89	1146	249		50		299		95						25	1565
	50	14		1		15		3						3	71
	22.9	17.8		50.0		19.9		31.7						8.3	22.04
	73.2	15.9		3.2		19.1		6.1						1.6	.944
90	1034	73		50		123		29						12	1198
	49	5		1		6		2						2	59
	21.1	14.6		50.0		20.5		14.5						6.0	20.3
	86.3	6.1		4.2		10.3		2.4						1.0	.722

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1903

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
91	903	14		70		84								4	991
	19	1		1		2								1	22
	47.5	14.0		70.0		42.0								4.0	45.04
	91.1	1.4		7.1		8.5								0.4	.597
92	704	22		45		67				18			6	5	800
	46	2		1		3				1			2	2	54
	15.3	11.0		45.0		22.3				18.0			3.0	2.5	14.8
	88.0	2.8		5.6		8.4				2.3			0.8	0.6	.482
93	1184	39	17			56		126					6	3	1375
	38	1	2			3		5					1	1	48
	31.2	39.0	8.5			18.7		25.2					6.0	3.0	28.6
	86.1	2.8	1.2			4.1		9.2					0.4	0.2	.829
94	272									16					288
	13									1					14
	20.9									16.0					20.6
	94.4									5.6					.173

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
95	554	14	40	44		98								12	664
	25	1	1	1		3								2	30
	22.2	14.0	40.0	44.0		32.7								6.0	22.1
	83.4	2.1	6.0	6.6		14.8								1.8	.400
96	1923	134	28	132		294			22	4				11	2254
	70	7	1	2		10			1	1				1	83
	27.5	19.1	28.0	66.0		29.4			22.0	4.0				11.0	27.2
	85.3	5.9	1.2	5.9		13.0			1.0	0.2				0.5	1.359
97	1721	193		224		417		237						2	2377
	69	10		3		13		5						1	88
	24.9	19.3		74.7		32.1		47.4						2.0	27.01
	72.4	8.1		9.4		17.5		10.0						0.1	1.433
98	1230	72		150		862		201						3	2296
	53	21		1		22		4						1	80
	23.2	33.9		150.0		39.2		50.3						3.0	28.7
	53.6	31.0		6.5		37.5		8.8						0.1	1.385

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
99	1313	1757	88	350		2195	89	291					10		3898
	47	31	3	3		37	2	6					1		93
	27.9	56.7	29.3	116.7		59.3	44.5	48.5					10.0		41.9
	33.7	45.0	2.3	9.0		56.3	2.3	7.5					0.3		2.351
100	1310	1716	391	1187		3294	348	251							5203
	32	26	4	7		37	17	5							91
	40.9	66.0	97.8	169.6		89.0	20.5	50.2							57.2
	25.2	33.0	7.5	22.8		63.3	6.7	4.8							3.138
101	565	325	275			600	758	477							2400
	13	6	2			8	9	4							34
	43.5	54.2	137.5			75.0	84.2	119.3							70.6
	23.5	13.5	11.5			25.0	31.6	19.9							1.447

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
102	2561	62				62		40					26	76	2765
	139	5				5		1					2	9	156
	18.4	12.4				12.4		40.0					13.0	8.4	17.7
	92.6	2.2				2.2		1.5					0.9	2.8	1.667
103	1100	148		70		218	18							3	1339
	73	10		1		11	1							1	86
	15.1	14.8		70.0		19.8	18.0							3.0	15.6
	82.2	11.1		5.2		16.3	1.3							0.2	.807
104	1167	46	20	87		153									1320
	46	3	1	1		5									51
	25.4	15.3	20.0	87.0		30.6									25.9
	88.4	3.5	1.5	6.6		11.6									.796
105	832	25		11		36				9		26			903
	30	1		1		2				1		1			34
	27.7	25.0		11.0		18.0				9.0		26.0			26.6
	92.1	2.8		1.2		4.0				1.0		2.9			.544

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
106	588	50				50									638
	17	3				3									20
	34.6	16.7				16.7									31.9
	92.2	7.8				7.8									.384
107	221	172	13	50		235		88	17						561
	15	10	1	1		12		4	1						32
	14.7	17.2	13.0	50.0		19.6		22.0	17.0						17.5
	39.4	30.7	2.3	8.9		41.9		15.7	3.0						.338
108	407	100	130	421		651	50	418							1526
	21	5	2	4		11	1	4							37
	19.4	20.0	65.0	105.3		59.2	50.0	104.5							41.2
	26.7	6.6	8.5	27.6		42.7	3.3	27.4							.920
109	30	13	150			163		30		250					473
	1	1	2			3		1		1					5
	30.0	13.0	75.0			54.3		30.0		250					94.6
	6.3	2.8	31.7			34.5		6.3		52.9					.285

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
110	30	30	219			249		20						40	339
	1	1	7			8		1						1	10
	30.0	30.0	31.3			31.1		20.0						40.0	33.9
	8.9	8.9	64.6			73.5		5.9						11.8	.204
111	1875	79				79		21						21	1996
	78	5				5		2						4	89
	24.0	15.8				15.8		10.5						5.2	22.4
	93.9	4.0				4.0		1.1						1.1	1.204
112	817	26				26		18						27	888
	35	2				2		1						4	42
	23.3	13.0				13.0		18.0						6.8	21.1
	92.0	2.9				2.9		2.0						3.0	.535
113	679		10	80		90		15							784
	23		1	1		2		1							26
	29.5		10.0	80.0		45.0		15.0							30.2
	86.6		1.3	10.2		11.5		1.9							.472

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
114	1037	100		402		502		138	350					9	2036
	65	8		2		10		2	1					3	81
	16.0	12.5		201.0		50.2		69.0	350.0					3.0	25.1
	50.9	4.9		19.8		24.7		6.8	17.2					0.4	1.228
115	599	299		106		405	10	308				200		1	1523
	30	5		2		7	1	4				1		1	44
	20.0	59.8		53.0		57.9	10.0	77.0				200.0		1.0	34.6
	39.3	19.6		7.0		26.6	0.7	20.2				13.1		0.1	.918
116	360	23	720	160		903		582						51	1896
	20	2	6	2		10		4						2	36
	18.0	11.5	120.0	80.0		90.3		145.5						25.5	52.7
	19.0	1.2	38.0	8.4		47.6		30.7						2.7	1.143
117	48	49	170	476		695	328	90							1161
	2	2	3	2		7	7	1							17
	24.0	24.5	56.7	238.0		99.3	46.9	90.0							68.3
	4.1	4.2	14.6	41.0		59.9	28.3	7.8							.700

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
118			288			288	287								575
			3			3	3								6
			96.0			96.0	95.7								95.8
			50.1			50.1	49.9								.346
119	667														667
	21														21
	31.8														31.8
	100.0														.402
120	484														484
	14														14
	34.6														34.6
	100.0														.291
121	549	27				27		10		7					593
	19	2				2		1		1					23
	28.9	13.5				13.5		10.0		7.0					25.8
	92.6	4.6				4.6		1.7		1.2					.357

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1901

APPENDIX II

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
122	1217													38	1255
	41													6	47
	29.7													6.3	26.7
	97.0													3.0	.757
Total	103294	22810	7633	10041	1320	41804	6801	8333	2016	1229		226	378	1688	165,769
	4133	626	126	93	4	849	174	159	21	34		2	22	187	5,581
	25.0	36.4	60.6	108.0	330.0	49.2	39.1	52.4	96.0	36.2		113.0	17.2	9.0	29.7
	62.3	13.8	4.6	6.1	0.8	25.2	4.1	5.0	1.2	0.7		0.1	0.2	1.0	100%

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
1 (1)	4521													63	4584
(2)	66													3	69
(3)	68.5													21.0	66.4
(4)	98.6													1.4	.547
2	1590	39				39				368				204	2201
	26	1				1				2				4	33
	61.2	39.0				39.0				184.0				51.0	66.7
	72.2	1.8				1.8				16.7				9.3	.262
3	3237													14	3251
	52													1	53
	62.3													14.0	61.3
	99.6													0.4	.388
4	4675	19				19								10	4704
	82	1				1								1	84
	57.0	19.0				19.0								10.0	56.0
	99.4	0.4				0.4								0.2	.561

Lines: 1 - total value; 2 - number; 3 - average value; 4 - percentage of total block value; last column - percentage area total.

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
5	3791	195				195		39		28				50	4103
	75	4				4		1		2				1	83
	50.5	48.8				48.8		39.0		14.0				50.0	49.4
	92.4	4.8				4.8		1.0		0.7				1.2	.490
6	5181	89	30			119.			33						5333
	92	2	1			3			1						96
	56.3	44.5	30.0			39.7			33.0						55.6
	97.1	1.7	0.6			2.3			0.6						.636
7	2442													30	2472
	43													1	44
	56.8													30.0	56.2
	98.8													1.2	.295
8	962	39				39		88							1089
	18	1				1		1							20
	53.4	39.0				39.0		88.0							54.5
	88.3	3.6				3.6		8.1							.130

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
9	1424	59				59								33	1516
	26	1				1								2	29
	54.8	59.0				59.0								16.5	52.3
	93.9	3.9				3.9								2.2	.181
10	2116	39				39		29							2184
	39	1				1		1							41
	54.3	39.0				39.0		29.0							53.3
	96.9	1.8				1.8		1.3							.260
11	1113									601	93			45	1852
	21									2	1			2	26
	53.0									300.5	93.0			22.5	71.2
	60.1									32.5	5.0			2.4	.221
12	3817	76	109			185		19						54	4075
	77	2	1			3		1						3	84
	49.6	38.0	109.0			61.7		19.0						18.0	48.5
	93.7	1.9	2.7			4.5		0.5						1.3	.486

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
13	3003	39				39								12	3054
	53	1				1								2	56
	56.7	39.0				39.0								6.0	54.5
	98.3	1.3				1.3								0.4	.364
14	2940	47				47								124	3111
	57	1				1								11	69
	51.6	47.0				47.0								11.3	45.1
	94.5	1.5				1.5								4.0	.371
15	2086	48				48		4						10	2148
	42	1				1		1						1	45
	49.7	48.0				48.0		4.0						10.0	47.7
	97.1	2.2				2.2		0.2						0.5	.256
16	2145													94	2239
	45													11	56
	47.7													8.5	40.0
	95.8													4.2	.267

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
17	1265	176	92			268		57		57	128			46	1821
	23	4	4			8		1		2	1			2	37
	55.0	44.0	23.0			33.5		57.0		28.5	128.0			23.0	49.2
	69.5	9.7	5.1			14.7		3.1		3.1	7.0			2.5	.271
18	5946	143	116			259	98	1101		448				203	8055
	95	5	2			7	1	4		1				16	124
	62.6	28.6	58.0			37.0	98.0	275.3		448.0				12.7	65.0
	73.8	1.8	1.4			3.2	1.2	13.7		5.6				2.5	.962
19	4741	434		1244		1678		272		[illegible]	70	42		13	6816
	88	7		1		8		3			1	2		1	103
	53.9	62.0		1244.0		209.8		90.7			70.0	21.0		13.0	66.2
	69.6	6.4		18.3		24.6		4.0			1.0	0.6		0.2	.814
20	3778	27				27				294				4	4103
	60	1				1				1				1	63
	62.9	27.0				27.0				294.0				4.0	65.1
	92.1	0.7				0.7				7.2				0.1	.490

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
21	4208		190	1235		1425	39							15	5687
	60		1	1		2	1							1	64
	70.1		190.0	1235.0		712.5	39.0							15.0	88.9
	74.0		3.3	21.7		25.0	0.7							0.3	.679
22	5508	58		800		858				1000				14	7380
	58	1		1		2				1				1	62
	94.9	58.0		800.0		429.0				1000.0				14.0	119.0
	74.6	0.8		10.8		11.6				13.6				0.2	.881
23	2030													21	2051
	22													1	23
	92.3													21.0	89.2
	99.0													1.0	.244
24	3718							78						35	3831
	57							2						2	61
	65.2							39.0						17.5	62.8
	97.1							2.0						0.9	.457

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
25	1307									1400				205	2912
	17									1				3	21
	76.9									1400.0				68.3	138.7
	44.9									48.1				7.0	.347
26	1935	39				39									1974
	32	1				1									33
	60.5	39.0				39.0									59.8
	98.1	2.0				2.0									.235
27	1847	61				61								30	1938
	34	1				1								1	36
	54.3	61.0				61.0								30.0	53.8
	95.3	3.2				3.2								1.5	.231
28	6891	113				113					34			233	7271
	97	2				2					1			13	113
	71.0	56.5				56.5					34.0			17.9	64.3
	94.8	1.6				1.6					0.5			3.2	.868

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
29	6509	131	40			171		82			20		14	145	6941
	112	3	1			4		2			1		1	7	127
	58.1	43.7	40.0			42.8		41.0			20.0		14.0	20.7	54.7
	93.8	1.9	0.6			2.5		1.2			0.3		0.2	2.1	.829
30	1263			1280		1280				900				17	3460
	23			1		1				1				1	26
	54.9			1280.0		1280.0				900.0				17.0	133.1
	36.5			37.0		37.0				26.0				0.5	.413
31	601	96				96	48							10	755
	17	1				1	1							1	20
	35.4	96.0				96.0	48.0							10.0	37.8
	79.6	12.7				12.7	6.4							1.3	.090
32	2319														2319
	40														40
	57.9														58.0
	100.0														.276

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
33	2200														2200
	44														44
	50.0														50.0
	100.0														.262
34	2497	139				139		75							2711
	51	4				4		2							57
	48.9	34.8				34.8		37.5							47.6
	92.1	5.1				5.1		2.8							.323
35	2631	240	40	832		1112		439	26					35	4243
	60	7	1	1		9		4	1					3	77
	43.9	34.3	40.0	832.0		123.6		109.8	26.0					11.7	55.1
	62.0	5.7	0.9	19.6		26.2		10.4	0.6					0.8	.506
36	2305	84	97	564		745	263	520	72			50	20	28	4003
	58	2	2	1		5	2	6	1			1	2	3	78
	39.7	42.0	48.5	564.0		149.0	131.5	86.7	72.0			50.0	10.0	9.3	51.3
	57.6	2.1	2.4	14.1		18.6	6.6	13.0	1.8			1.3	0.5	0.7	.478

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
37	1458		431			431	109	1116	479						3593
	21		3			3	1	2	2						29
	69.4		143.7			143.7	109.0	558.0	239.5						123.9
	40.6		12.0			12.0	3.0	31.1	13.3						.429
38	2170	457	340			797	99	78		753					3897
	26	4	4			8	1	1		2					38
	83.5	114.3	85.0			99.6	99.0	78.0		376.5					102.6
	55.7	11.7	.8.7			20.5	2.5	2.0		19.3					.465
39	4672	68				68	370		94	3646				82	8932
	46	1				1	3		1	4				3	58
	101.6	68.0				68.0	123.3		94.0	911.5				27.3	154.0
	52.3	0.7				0.7	4.1		1.1	40.8				0.9	1.06
40	7849	82				82		68						70	8069
	144	2				2		1						4	151
	54.5	41.0				41.0		68.0						17.5	53.4
	97.3	1.0				1.0		0.8						0.9	.963

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
41	3447	28				28		111						10	3596
	66	1				1		3						1	71
	52.2	28.0				28.0		37.0						10.0	50.6
	95.9	0.8				0.8		3.1						0.3	.429
42	152								54	1576	622				2404
	1								1	4	1				7
	152.0								54.0	394.0	622.0				343.4
	6.3								2.3	65.6	25.9				.287
43	2742	47				47		290						10	3089
	49	1				1		3						1	54
	55.9	47.0				47.0		96.7						10.0	57.2
	88.8	1.5				1.5		9.4						0.3	.368
44	2742	22	135			157		811	173	46	79				4008
	51	1	3			4		4	1	1	1				62
	53.8	22.0	45.0			39.3		202.8	173.0	46.0	79.0				64.6
	68.4	0.6	3.4			3.9		20.2	4.3	1.2	2.0				.478

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
45	2015	64				64		292						112	2483
	39	2				2		2						1	44
	51.7	32.0				32.0		146.0						112.0	56.4
	81.2	2.6				2.6		11.8						4.5	.296
46	1975	674	186	3226		4086	569	309	228					41	7208
	38	14	1	3		18	4	5	2					1	68
	51.9	48.1	186.0	1075.3		22.7	142.3	61.8	114.0					41.0	106.0
	27.4	9.4	2.6	44.8		56.7	7.9	4.3	3.2					0.6	.860
47	2086	1778	742			2520	652	1279						59	6596
	37	21	3			24	3	8						3	75
	56.4	84.7	247.3			105.0	217.3	159.9						19.7	87.9
	31.6	27.0	11.3			38.2	9.9	19.4						0.9	.787
48	1478	266				266	2536	90		1212				104	5686
	10	2				2	18	1		1				1	33
	147.8	133				133	140.9	90.0		1212.0				104.0	172.3
	26.0	4.7				4.7	44.6	1.6		21.3				1.8	.679

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
49	2654	167		2164		2331	2483		323	342	209			37	8379
	28	2		2		4	25		2	2	1			1	63
	94.8	83.5		1082.0		582.8	99.3		161.5	171.0	209.0			37.0	133.0
	31.7	2.0		25.8		27.8	29.6		3.9	4.1	2.5			0.4	1.00
50	3253						98		513			4407		243	8514
	41						1		1			1		2	46
	79.3						98.0		513.0			4407.0		121.5	185.1
	38.2						1.2		6.0			51.8		2.9	1.01
51	2615	327				327	1039	157						70	4208
	37	6				6	3	1						2	49
	70.7	54.5				54.5	346.3	157.0						35.0	85.9
	62.2	7.8				7.8	24.6	3.7						1.7	.502
52	3574	88	290	650		1028		186				905		16	5709
	52	2	1	1		4		2				3		1	62
	68.7	44.0	290.0	650.0		257.0		93.0				301.7		16.0	92.1
	62.6	1.5	5.1	11.4		18.0		3.3				15.9		0.3	.681

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
53	5372	511	2978	1050		4539	4453	1816						630	16,810
	86	7	9	1		17	5	10						3	121
	62.5	73.0	330.9	1050.0		267	890.6	181.6						210.0	138.9
	32.0	3.0	17.7	6.3		27.0	26.5	10.9						3.7	2.007
54	2237	34				34				35	174				2,480
	37	1				1				1	1				40
	60.5	34.0				34.0				35.0	174.0				62.0
	90.2	1.4				1.4				1.4	7.0				.296
55	2792						48	44							2,884
	45						1	1							47
	62.0						48.0	44.0							61.4
	96.8						1.7	1.5							.344
56	1370	126				126									1,496
	28	3				3									31
	48.9	42.0				42.0									48.3
	91.6	8.4				8.4									.178

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
57	840									27					867
	20									1					21
	42.0									27.0					41.3
	96.9									3.1					.103
58	7327	390	1821	590		2801		14		238				15	10,395
	145	9	9	1		19		1		1				1	167
	50.5	43.3	202.3	590.0		147.4		14.0		238.0				15.0	62.2
	70.5	3.8	17.5	5.7		27.0		0.1		2.3				0.1	1.24
59	1143														1143
	20														20
	57.1														57.2
	100.0														.136
60	1141	56		1193		1249									2390
	19	1		1		2									21
	60.1	56.0		1193.0		624.5									113.8
	47.7	2.3		50.0		52.3									.285

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
61	1627		74			74		382						65	2148
	32		2			2		5						3	42
	50.8		37.0			37.0		76.4						21.7	51.1
	75.7		3.5			3.5		17.8						3.0	.256
62	7447							2503						181	10,131
	89							3						9	101
	83.7							834.3						20.1	100.3
	73.5							24.7						1.8	1.210
63	615	59				59				14					688
	11	1				1				1					13
	55.9	59.0				59.0				14.0					52.9
	89.5	8.6				8.6				2.0					.082
64	1665	542		1000		1542		333						38	3578
	36	3		1		4		1						2	43
	46.3	180.7		1000.0		385.5		333.0						19.0	83.2
	46.5	15.2		28.0		43.1		9.3						1.1	.427

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
65	1816	239	564			803		42	29					29	2719
	43	8	3			11		1	1					1	57
	42.2	29.9	188.0			73		42.0	29.0					29.0	47.7
	66.8	8.8	20.7			29.5		1.5	1.1					1.1	.324
66	1788	87				87		676	57						2608
	30	1				1		5	1						37
	59.6	87.0				87.0		135.2	57.0						70.5
	68.6	3.3				3.3		25.9	2.2						.311
67	1131	735	439			1174	319	2139	64					48	4875
	15	2	4			6	3	11	1					1	37
	75.4	367.5	109.8			195.7	103.0	194.5	64.0					48.0	131.8
	23.2	15.1	9.0			24.1	6.5	43.9	1.3					1.0	.582
68	2759	5642	1059	2580		9281	1005	593	2465					125	16,228
	58	37	11	2		50	12	7	2					2	131
	47.6	152.5	96.3	1290.0		185.6	83.8	84.7	1232.5					62.5	123.9
	17.0	34.8	6.5	15.9		57.2	6.2	3.7	15.2					0.8	1.938

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX XII

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
69	2198	12,382	881	3068	323	16,654	6158	2326	2962			30		1463	31,791
	32	57	4	2	1	64	30	5	3			1		3	138
	68.7	217.2	220.3	1534.0	323.0	260.2	205.3	465.2	987.3			30.0		487.7	230.4
	6.9	39.0	2.8	9.7	1.0	52.4	19.4	7.3	9.3			0.1		4.6	3.796
70	1913	2537	2239	4968		9744	6296	703	1153	322	277				20,408
	23	19	7	2		28	46	3	5	2	2				109
	83.2	133.5	319.9	2484.0		348.0	136.9	234.3	230.6	161.0	138.5				187.2
	9.4	12.4	11.0	24.3		47.7	30.9	3.4	5.7	1.6	1.4				2.437
71	2362	889	417		592	1898	5271	623	2319	116	116				12,705
	30	9	2		1	12	37	3	7	1	1				91
	78.8	98.8	208.5		592.0	158.2	142.5	207.7	331.3	116.0	116.0				139.6
	18.6	7.0	3.3		4.7	14.9	41.5	4.9	18.3	0.9	0.9				1.517
72	508		1578			1578		390						225	2701
	9		8			8		2						2	21
	56.4		197.3			197.3		195.0						112.5	128.6
	18.8		58.4			58.4		14.4						8.3	.322

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
73&75	227	47	906			953	7037			2408					10,625
	4	1	4			5	2			1					12
	56.8	47.0	226.5			19.1	3518.5			2408.0					885.4
	2.1	0.4	8.5			9.0	66.2			22.7					1.269
74	1256	29	1763	527		2319		292					23	75	3965
	28	1	10	1		12		2					1	2	45
	44.9	29.0	176.3	527.0		178.4		146.0					23.0	37.5	88.1
	31.7	0.7	44.5	13.3		58.5		7.4					0.6	1.9	.473
76			40			40								250	290
			1			1								1	2
			40.0			40.0								250.0	145.0
			13.8			13.8								86.2	.034
77	4438	907				907		313		14				40	5712
	101	13				13		1		1				2	118
	43.9	69.8				69.8		313.0		14.0				20.0	48.4
	77.7	15.9				15.9		5.5		0.3				0.7	.682

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
78	2775	47	26	1047		1120								121	4016
	48	1	1	1		3								4	55
	57.8	47.0	26.0	1047.0		373.3								30.3	73.0
	69.1	1.2	0.7	26.1		27.9								3.0	.479
79	3192	437	39	780		1260				914	139	60			5561
	62	8	1	1		10				3	1	2			78
	51.5	54.6	39.0	780.0		126.0				304.7	139.0	30.0			71.3
	57.4	7.9	0.7	14.0		22.7				16.4	2.5	1.1			.664
80	3610	824	1161			1985		780							6375
	68	17	1			18		5							91
	53.1	48.5	1161.0			110.3		156.0							70.1
	56.6	12.9	18.2			31.1		12.2							.761
81	2097	511	469			980	1017	1217			68	99			5478
	40	10	3			13	6	6			1	1			67
	52.4	51.1	156.3			75.4	169.5	202.8			68.0	99.0			81.8
	38.3	9.3	8.6			17.9	18.6	22.2			1.2	1.8			.654

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
82	1879	3815				3815	732	1622						150	8198
	26	19				19	6	3						1	55
	72.3	200.8				200.8	122.0	540.7						150.0	149.1
	22.9	46.5				46.5	8.9	19.8						1.8	.979
83	1801	3934	368	1206		5508	1045	743	954		145			142	10,338
	20	26	2	1		29	7	6	3		1			2	68
	90.1	151.3	184.0	1206.0		189.9	149.3	123.8	318.0		145.0			71.0	152.0
	17.4	38.1	3.6	11.7		53.3	10.1	7.2	9.2		1.4			1.4	1.234
84	2070	17805	2429	900	1044	22178	2642	693	164	499				47	28,293
	16	40	7	1	2	50	18	5	2	2				1	94
	129.4	445.1	347.0	900.0	522.0	443.6	146.8	138.6	82.0	249.5				47.0	301.0
	7.3	62.9	8.6	3.2	3.7	78.4	9.3	2.4	0.6	1.8				0.2	3.379
85	181	46684		5441	1422	53547	12194			145	30				66,097
	2	65		2	1	68	89			1	1				161
	90.5	718.2		2720.5	1422.0	787.5	137.0			145.0	30.0				410.5
	0.3	70.6		8.2	2.2	81.0	18.5			0.2	0.1				7.894

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
86	976	9855	434	3120	5014	18,423	18922	50	299		1923				40,593
	12	33	3	1	3	40	123	1	1		1				178
	81.3	298.6	144.7	3120.0	1671.3	460.6	153.8	50.0	299.0		1923.0				228.1
	2.4	24.3	1.1	7.7	12.4	45.4	46.6	0.1	0.7		4.7				4.848
87	195									8189		87		100	8571
	3									5		2		1	11
	65.0									1637.8		43.5		100.0	779.2
	2.3									95.5		1.0		1.2	1.023
88	251	1194	2455	2495		6144	8830	2328					49		17,602
	3	11	8	2		21	10	4					1		39
	83.7	108.5	306.9	1247.5		292.6	883.0	582.0					49.0		451.3
	1.4	6.8	14.0	14.2		34.9	50.2	13.2					0.3		2.102
89	3587	1571	96			1667		47					13	33	5347
	64	26	2			28		2					1	2	97
	56.0	60.4	48.0			59.5		23.5					13.0	16.5	55.1
	67.1	29.4	1.8			31.2		0.9					0.2	0.6	.638

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
90	3061	997	1592	1508		4097	116	708		24				20	8026
	49	5	3	1		9	1	3		1				1	64
	62.5	199.4	530.7	1508.0		455.2	116.0	236.0		24.0				20.0	125.4
	38.1	12.4	19.8	18.8		51.1	1.5	8.8		0.3				0.3	.958
91	2771	121				121		112		264				72	3340
	39	2				2		1		1				3	46
	71.1	60.5				60.5		112.0		264.0				24.0	72.6
	83.0	3.6				3.6		3.4		7.9				2.2	.398
92	1846	17				17		477						8	2348
	43	1				1		3						1	48
	42.9	17.0				17.0		159.0						8.0	48.9
	78.6	0.7				0.7		20.3						0.3	.280
93	2323	759	1742			2501		475						157	5456
	35	5	5			10		7						2	54
	66.4	151.8	348.4			250.1		67.9						78.5	101.0
	42.6	14.0	31.9			45.8		8.7						2.9	.651

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
94	1044								54		181				1279
	18								1		1				20
	58.0								54.0		181.0				64.0
	81.6								4.2		14.2				.152
95	1294	294		1185		1479		135						15	2923
	22	1		1		2		1						1	26
	58.8	294.0		1185.0		739.5		135.0						15.0	112.4
	44.3	10.1		40.5		50.6		4.6						0.5	.349
96	4051	694	302			996	83	3354		468	306			172	9430
	55	11	3			14	1	1		1	2			5	79
	73.7	63.1	100.6			71.1	83.0	3354.0		468.0	153.0			34.4	119.4
	43.0	7.4	3.2			10.5	0.9	35.6		5.0	3.3			1.8	1.126
97	2554	1468	251	2976		4695	541	1813					57	65	9725
	40	18	3	2		23	3	7					1	1	75
	63.9	81.6	83.7	1488.0		204.1	180.3	259.0					57.0	65.0	123.7
	26.3	15.1	2.6	30.6		48.3	5.6	18.6					0.6	0.7	1.161

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
98	1314	5968	99			6067	746	3211							11,338
	27	27	2			27	8	12							74
	48.7	238.7	49.5			224.7	93.3	267.6							153.2
	11.6	52.6	0.9			53.5	6.6	28.3							1.354
99	811	10043	2430	2860		15333	1111	542						1877	19,674
	10	25	8	2		35	11	4						2	62
	81.1	401.7	303.8	1430.0		438.0	101.0	135.5						938.5	317.3
	4.1	51.1	12.4	14.5		78.0	5.6	2.8						9.5	2.349
100	251	15751	2810	5072	1534	25167	6598	256	894	147			19	270	33,602
	2	35	7	3	2	47	53	4	3	1			1	2	113
	125.5	450.0	401.4	1690.7	767.0	535.5	124.5	64.0	298.0	147.0			19.0	135.0	297.3
	0.7	46.9	8.4	15.1	4.6	75.0	19.6	0.8	2.7	0.4			0.06	0.8	4.013
101	97	2412	26		2276	4714	7414	2861		4173		161			19,420
	2	7	1		1	9	49	2		1		1			64
	48.5	344.6	26.0		2276.0	523.8	151.3	1430.5		4173.0		161.0			303.4
	0.5	12.4	0.1		11.7	24.3	38.2	14.7		21.5		0.8			2.319

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
102	8318	186	1025	1301		2512		1091					38	162	12,121
	167	4	5	1		10		4					1	7	189
	49.8	46.5	205.0	1301.0		251.2		272.8					38.0	23.1	64.1
	68.6	1.5	8.5	10.7		20.7		9.0					0.3	1.3	1.447
103	2877	241		624		865		83						61	3886
	63	6		1		7		3						3	76
	45.7	40.2		624.0		123.6		27.7						20.3	51.1
	74.0	6.2		16.1		22.2		2.1						1.6	.464
104	2962	284	339	1000		1623		807						20	5412
	53	7	1	1		9		3						1	66
	55.9	40.6	339.0	1000.0		180.3		269.0						20.0	82.0
	54.7	5.3	6.3	18.6		30.0		14.9						0.4	.646
105	2151		135			135	85	852		899	134	258		150	4664
	38		2			2	1	4		3	1	1		1	51
	56.6		67.5			67.5	85.0	213.0		299.7	134.0	258.0		150.0	91.5
	46.1		2.9			2.9	1.8	18.3		19.3	2.9	5.5		3.2	.557

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Resid-ences	Shops	Ware-houses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
106	530 7 75.7 7.6	1143 6 190.5 16.3				1143 6 190.5 16.3	1283 3 427.7 18.3	247 1 247.0 3.5	1297 2 648.5 18.5	2150 1 2150.0 30.7	94 1 94.0 1.3			250 1 250.0 3.6	6994 22 317.9 .835
107	1217 3 405.7 13.0	307 1 307.0 3.3	886 4 221.5 9.5			1193 5 238.6 12.7	839 6 139.8 9.0	305 1 305.0 3.3		5710 6 951.7 61.0		104 2 52.0 1.1			9368 23 407.3 1.118
108	706 8 88.3 4.9	2725 23 118.5 18.8	4173 11 379.4 28.8	2860 2 1430.0 19.8		9758 36 271.1 67.4	1202 14 85.9 8.3	584 4 146.0 4.0	2221 2 1110.5 15.4						14,471 64 226.1 1.728
109	104 2 52.0 3.1		249 2 124.5 7.4			249 2 124.5 7.4	50 1 50.0 1.5			2968 4 742.0 88.0					3371 9 374.6 .402
110	101 1 101.0 5.5	231 3 77.0 12.6	436 4 62.3 23.8			667 10 66.7 36.4	412 2 206.0 22.5	130 2 65.0 7.1				48 1 48.0 2.6	19 1 19.0 1.0	454 2 227.0 24.8	1831 19 96.4 .218

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
111	5965	231	166			397		3300		700				30	10392
	101	4	2			6		6		1				1	115
	59.1	57.8	83.0			66.2		550.0		700.0				30.0	90.4
	57.4	2.22	1.6			3.82		31.8		6.74				.29	1.241
112	1600	271	85			356	38	321		559				107	2981
	31	2	1			3	1	2		2				2	41
	51.6	135.5	85.0			118.7	38.0	160.5		279.5				53.5	72.7
	53.7	9.1	2.9			11.9	1.3	10.8		18.8				3.6	.356
113	1855	411	137	1740		2288	546	97						91	4877
	17	3	1	1		5	3	1						2	28
	109.1	137.0	137.9	1740.0		457.6	182.0	97.0						45.5	174.2
	38.0	8.4	2.8	35.8		46.9	11.2	2.0						1.9	.582
114	1656	648	1153	2726		4527	38	1219	482			503	9	249	8683
	29	11	6	2		19	1	7	1			1	1	4	63
	57.1	58.9	192.2	1363.0		238.3	38.0	174.0	482.0			503.0	9.0	62.3	137.8
	19.1	7.5	13.3	31.4		52.1	0.4	14.0	5.6			5.8	0.1	2.9	1.037

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
115	228		3720	832		4552		639	105			1114	58	81	6777
	4		9	1		10		2	1			1	1	2	21
	57.0		413.3	832.0		455.2		319.5	105.0			1114.0	58.0	40.5	322.7
	3.4		54.9	12.3		67.2		9.4	1.6			16.4	0.9	1.2	.809
116		867				867		7649							8516
		1				1		2							3
		867.0				867.0		3824.5							2838.7
		10.2				10.2		89.8							1.017
117			827	2340		3167	1199								4366
			3	. 2		5	11								16
			275.7	1170.0		633.4	109.0								272.9
			18.9	53.6		72.5	27.5								.521
118	50		1159			1159	1242								2451
	1		6			6	10								17
	50.0		193.2			193.2	124.2								144.2
	2.0		47.3			47.3	50.7								.292

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
119	1169	27				27									1196
	18	1				1									19
	64.9	27.0				27.0									62.9
	97.7	2.3				2.3									.142
120	932														932
	17														17
	54.8														54.8
	100.0														.111
121	1386	32				32								10	1428
	26	1				1								1	28
	53.3	32.0				32.0								10.0	51.0
	97.1	2.2				2.2								0.7	.170
122	5094													33	5127
	84													2	86
	60.6													16.5	59.6
	99.4													0.6	.612

FUNCTIONAL DISTRIBUTION OF PROPERTY VALUES 1954

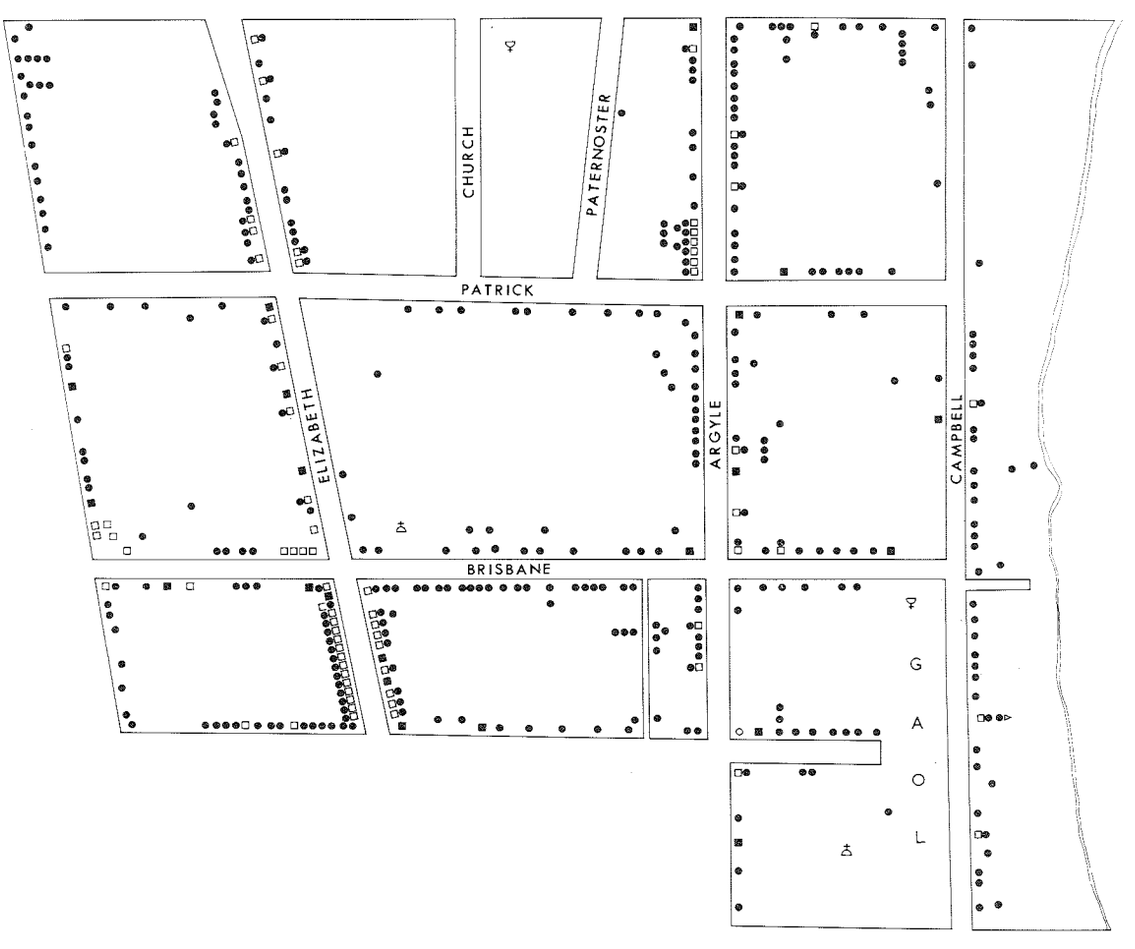
APPENDIX III

Block Number	Residences	Shops	Warehouses	Hotels	Banks	Total Commerce	Offices	Factories	Halls Theatres Clubs	Public Buildings	Churches Chapels	Public Utilities	Stables	Land	Block Total
1-122	290,328	164,515	48,616	68,984	12,205	294,467	107,915	59,527	17,514	44,559	4,812	6,993	319	10,782	837,269
	4,865	751	222	52	11	1036	638	242	49	72	21	18	12	211	7164
	59.67	219.06	219.9	1326.6	1109.5	284.3	169.1	247.6	357.4	618.9	229.1	388.5	26.6	51.09	116.9
	34.67	19.64	5.830	8.239	1.457	35.17	12.88	7.109	2.091	5.321	.574	.835	.038	1.287	100%

APPENDIX IV

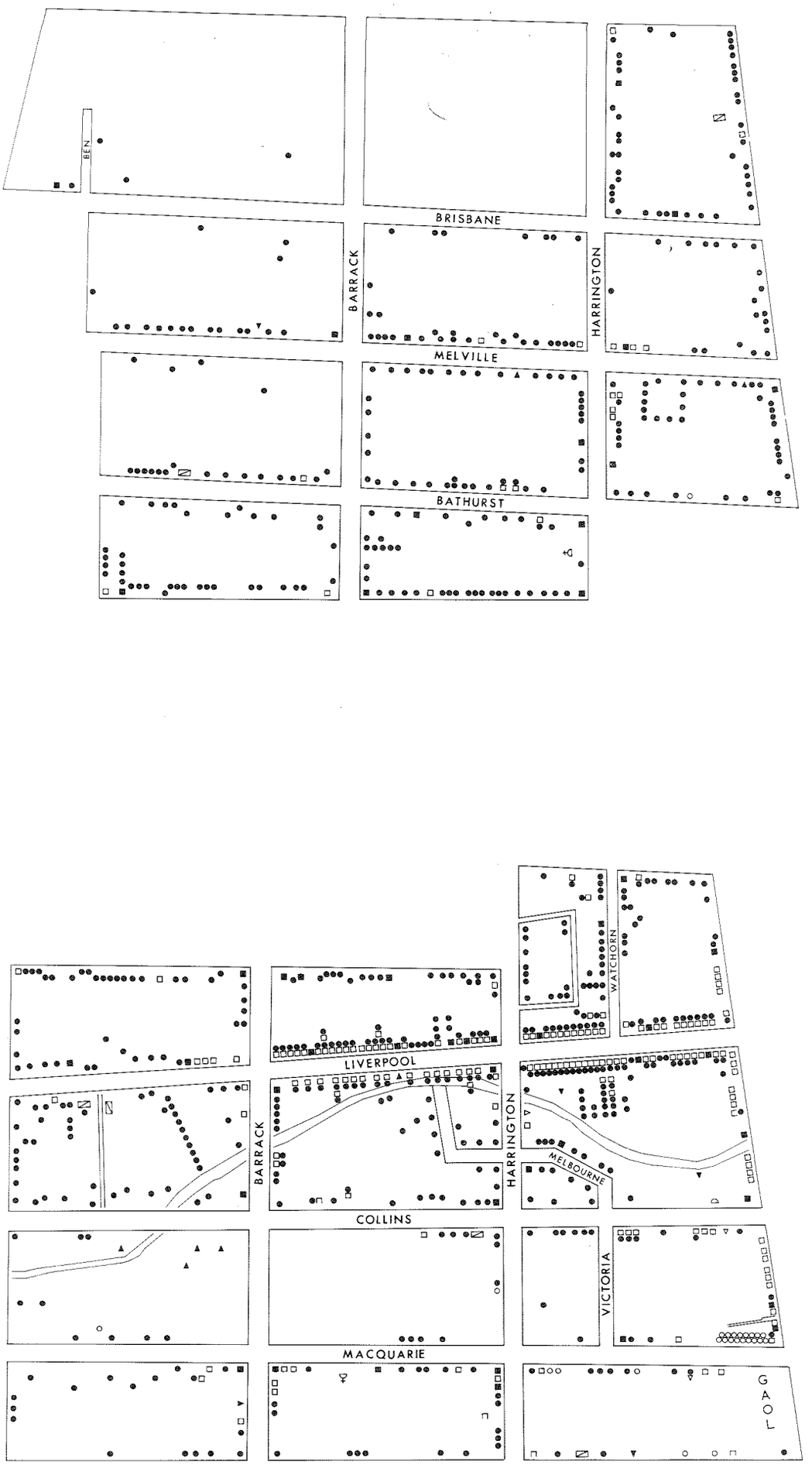
Key to mapping sections for distribution of functional and townscape units (Appendices V - VIII).

APPENDIX V



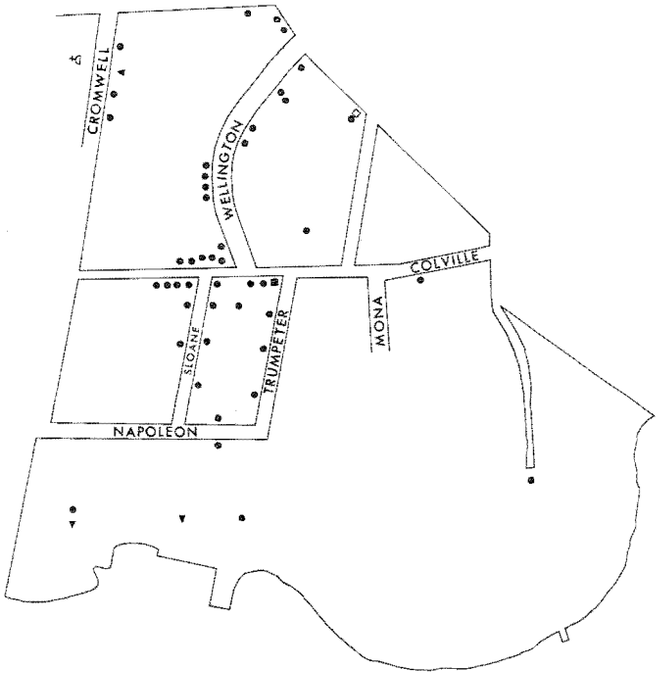
Distribution of functional units in Hobart 1847, Sections 1 and 2.

APPENDIX V



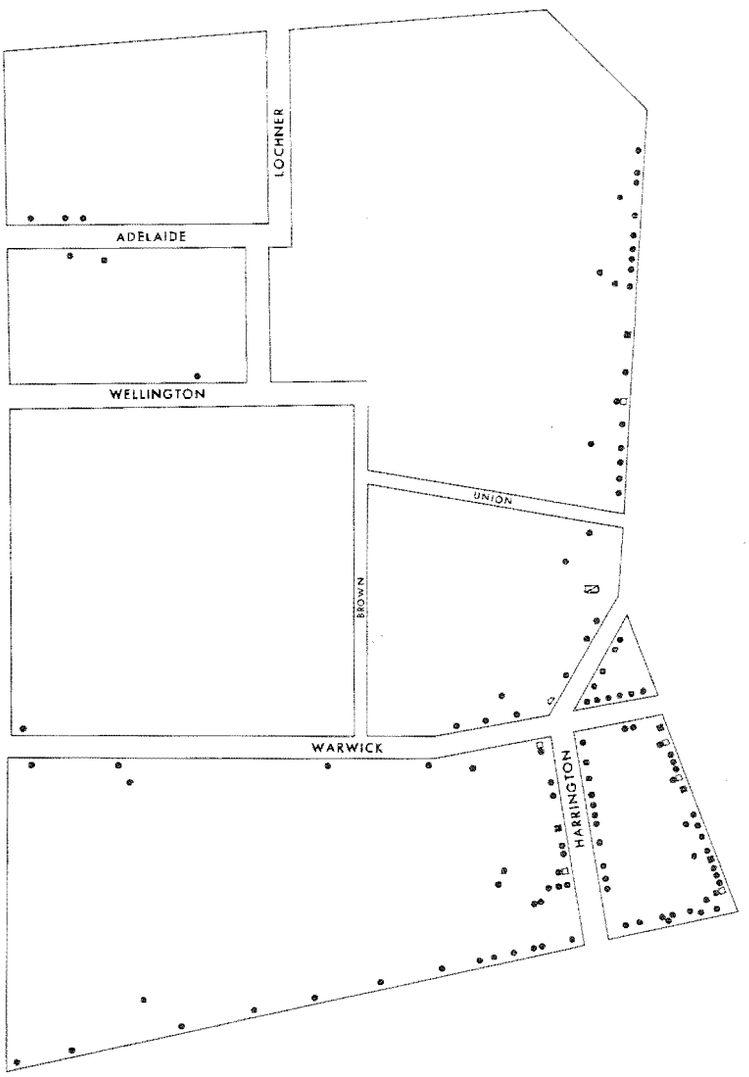
Distribution of functional units in Hobart 1847. Sections 3 and 4.

APPENDIX V

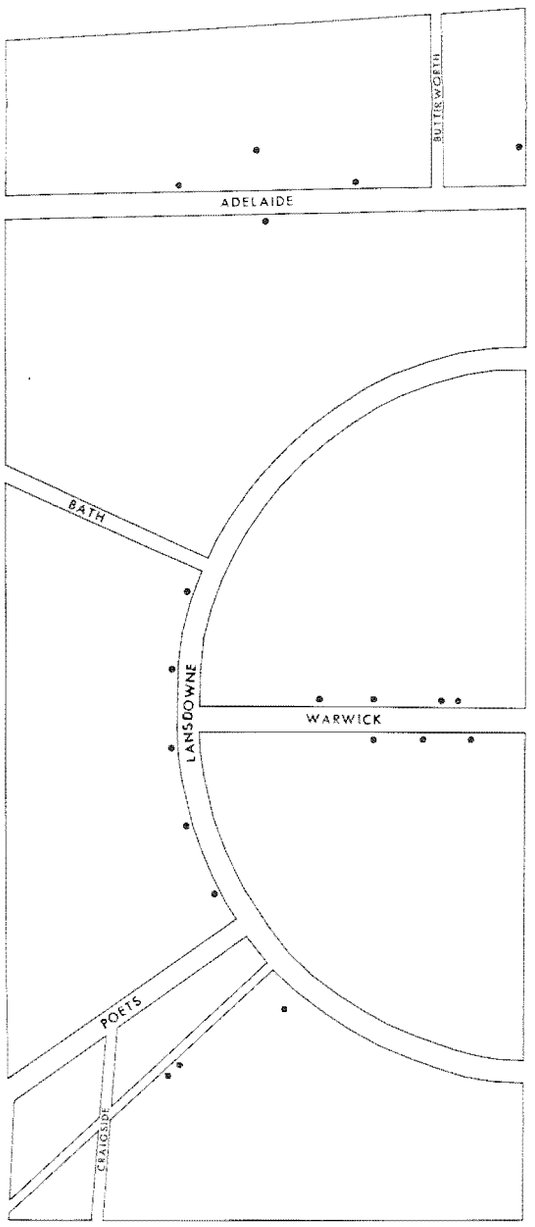


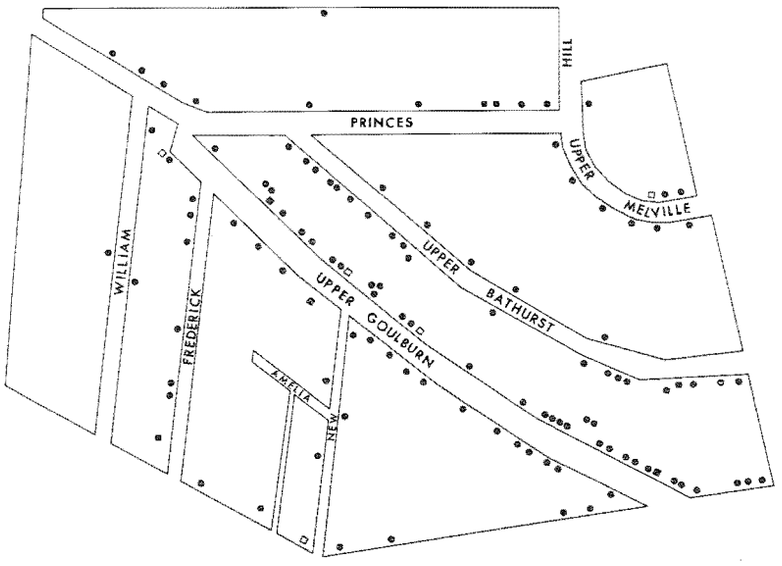
Distribution of functional units in Hobart 1847. Sections 5 and 6.

APPENDIX V



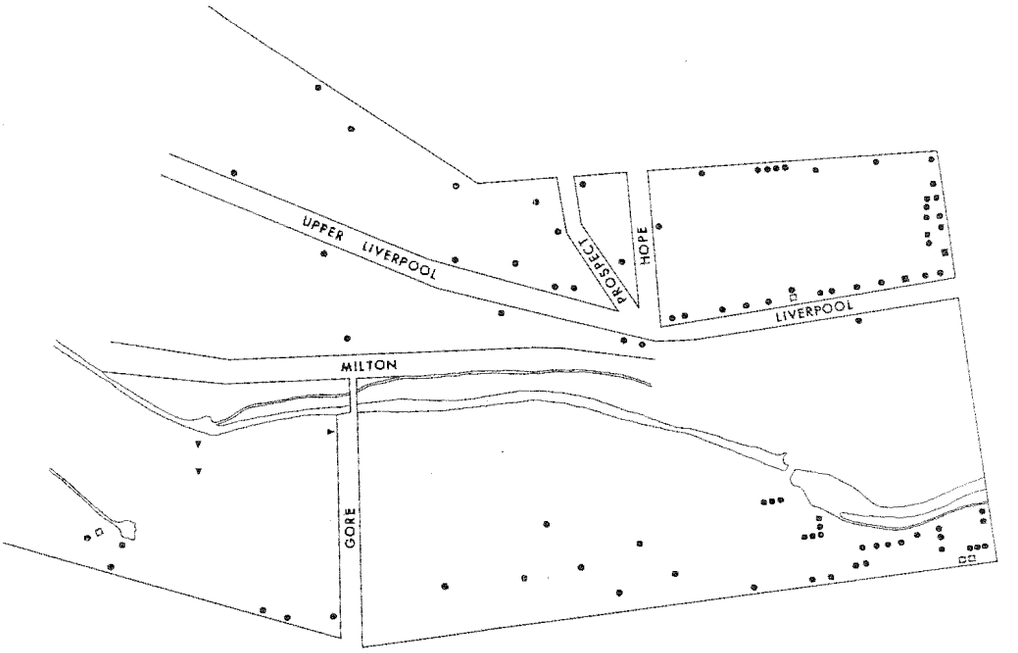
Distribution of functional units in Hobart 1847. Sections 7 and 8.

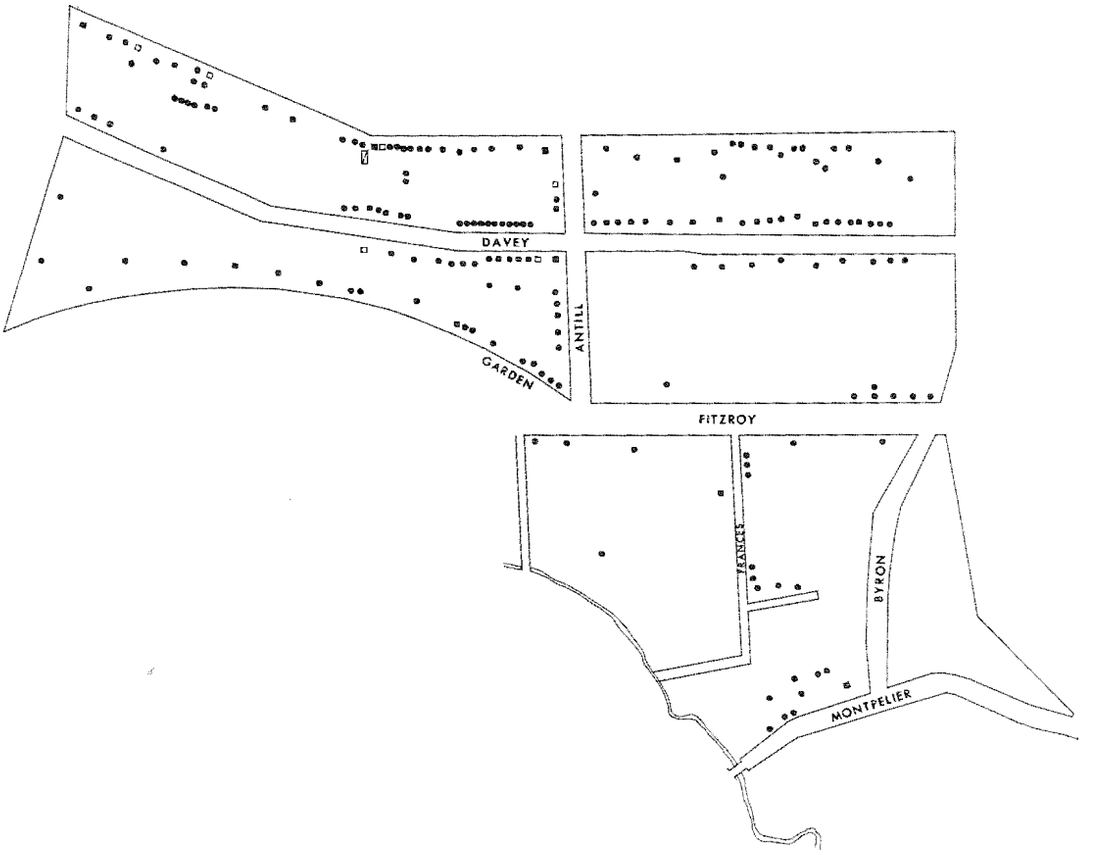




Distribution of functional units in Hobart 1847. Sections 9 and 10.

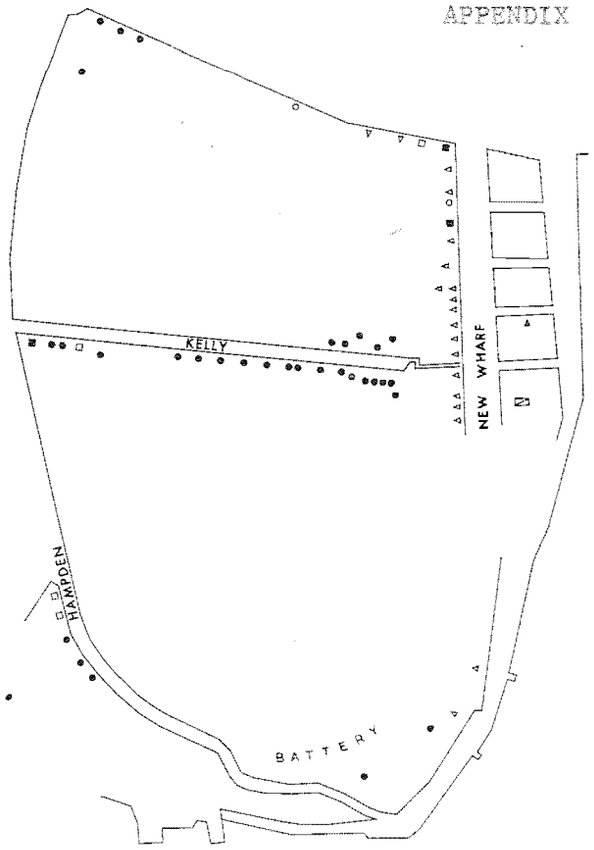
APPENDIX V

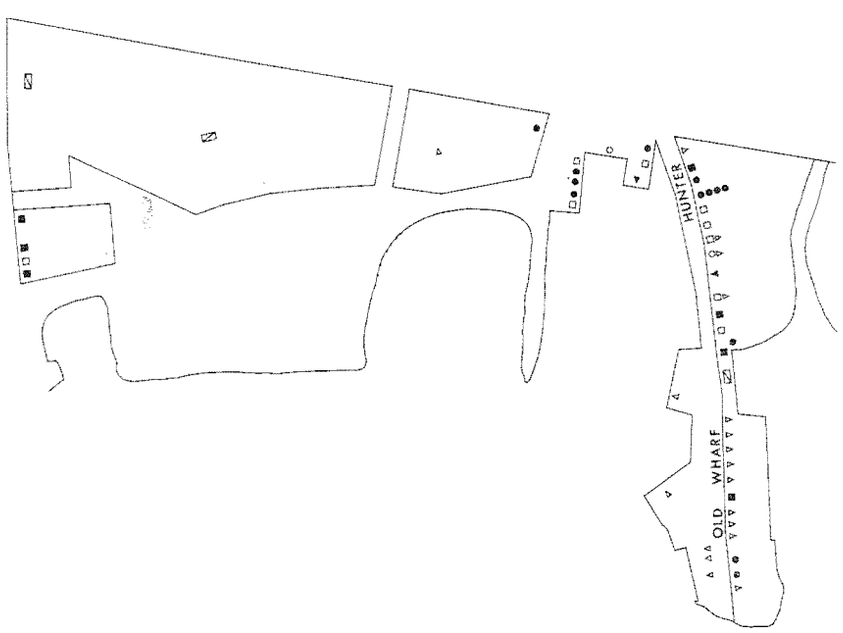




Distribution of functional units in Hobart 1847. Sections 11 and 12.

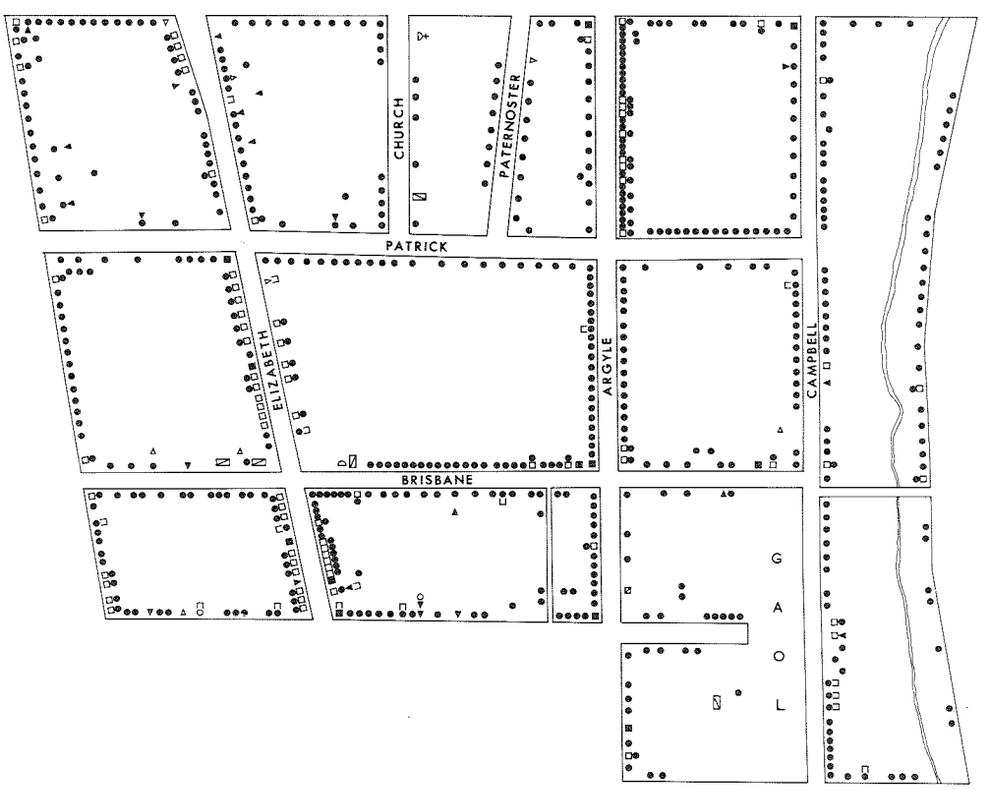
APPENDIX V





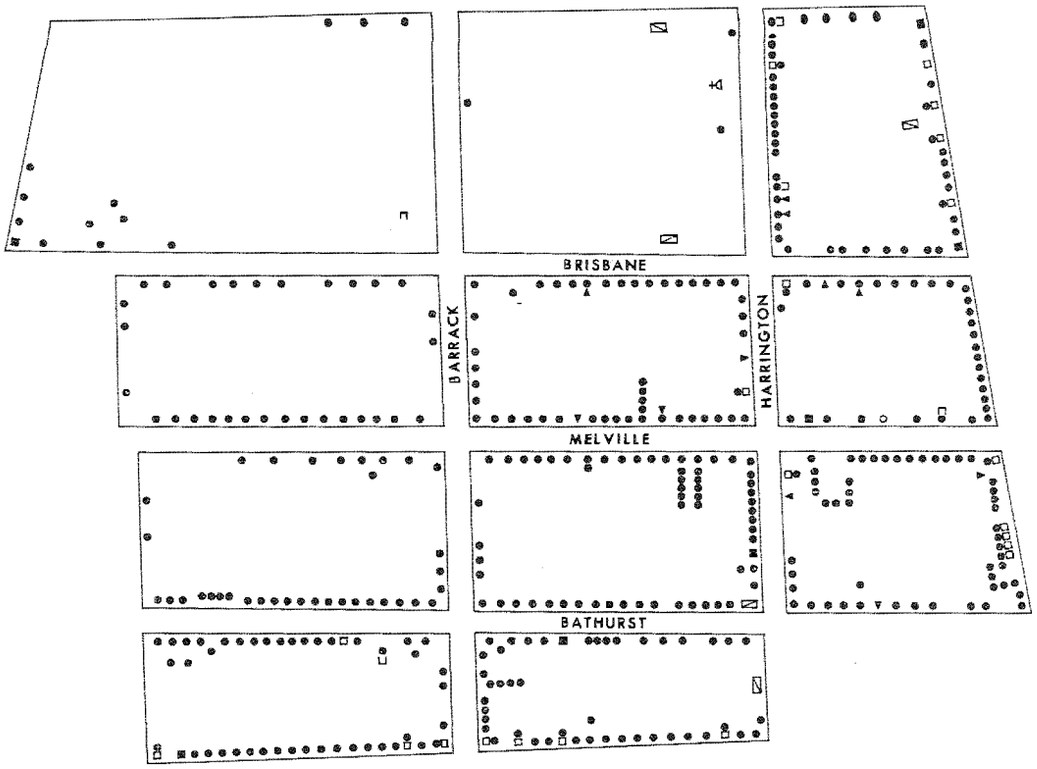
Distribution of functional units in Hobart 1847. Sections 13 and 14.

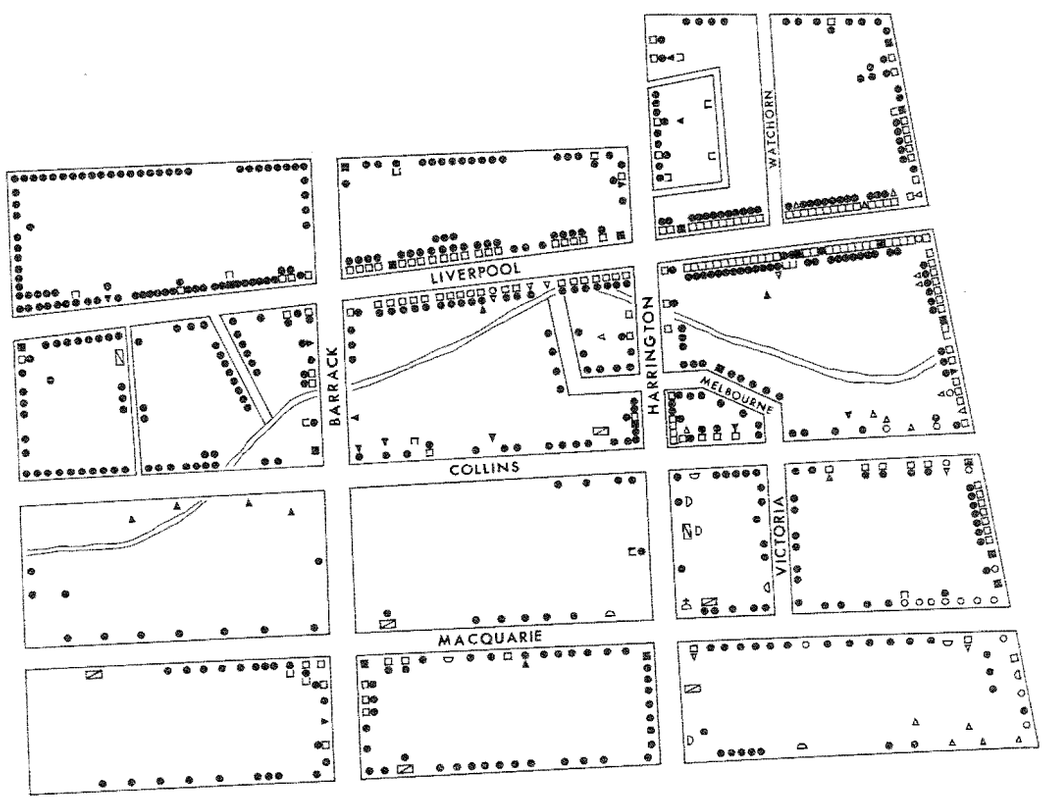
APPENDIX VI



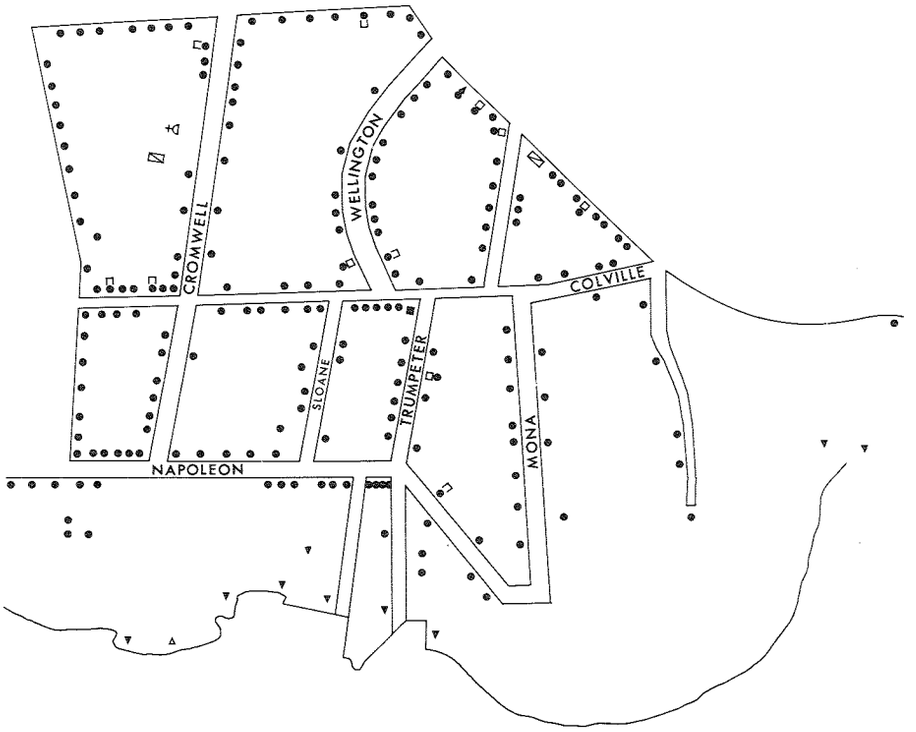
Distribution of functional units in inner Hobart 1901. Sections 1 and 2.

APPENDIX VI

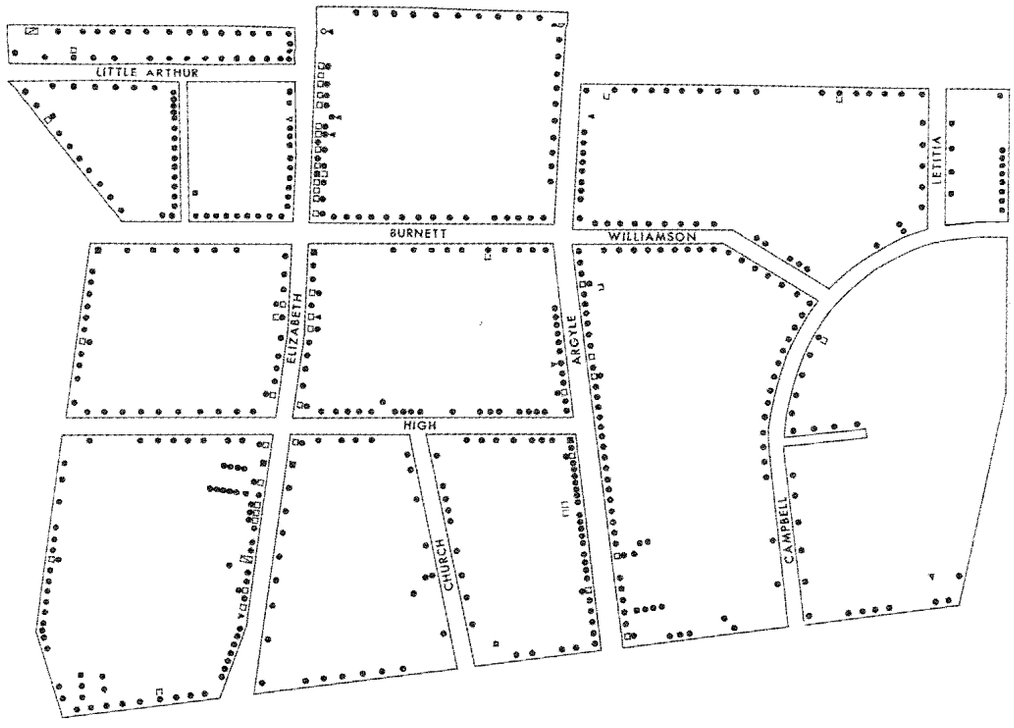


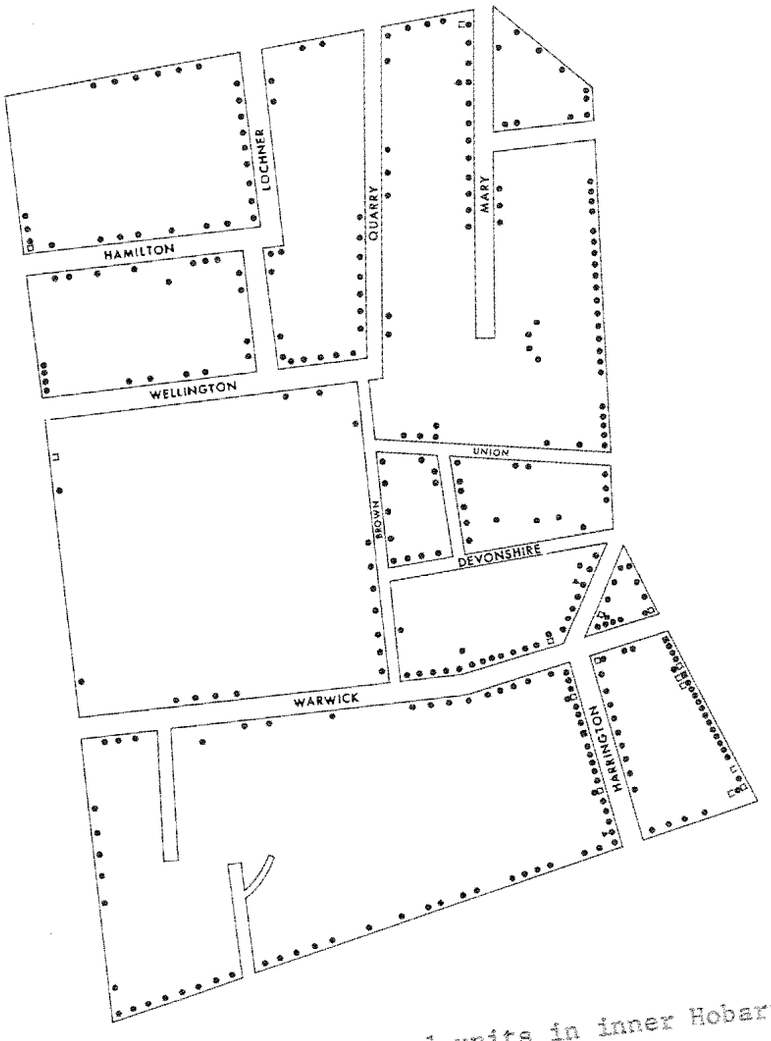


Distribution of functional units in inner Hobart 1901.
Sections 3 and 4.



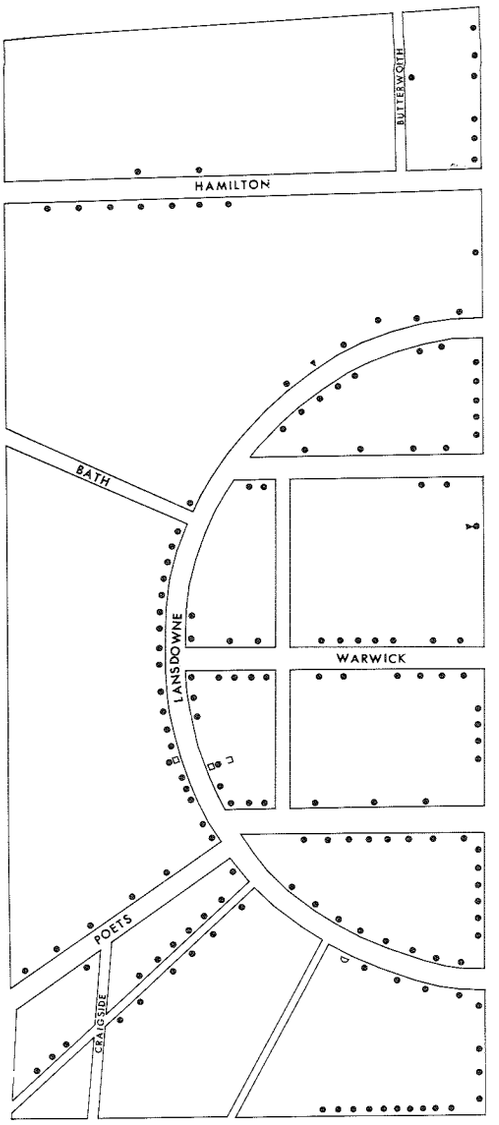
Distribution of functional units in inner Hobart 1901.
Sections 5 and 6.

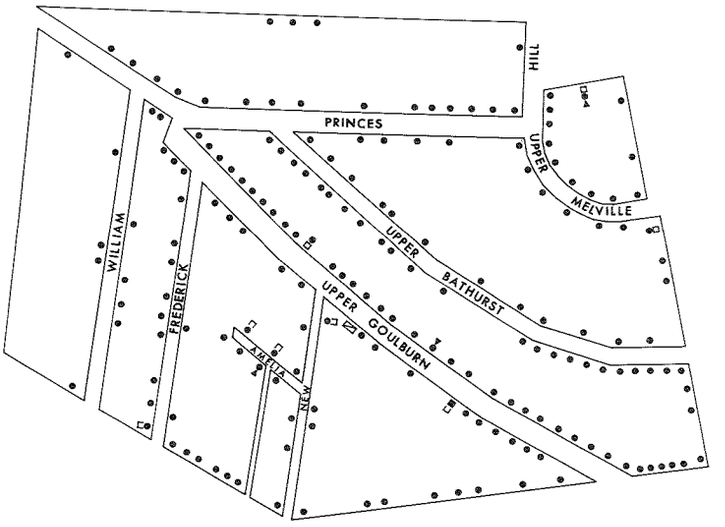




Distribution of functional units in inner Hobart 1901.
Sections 7 and 8.

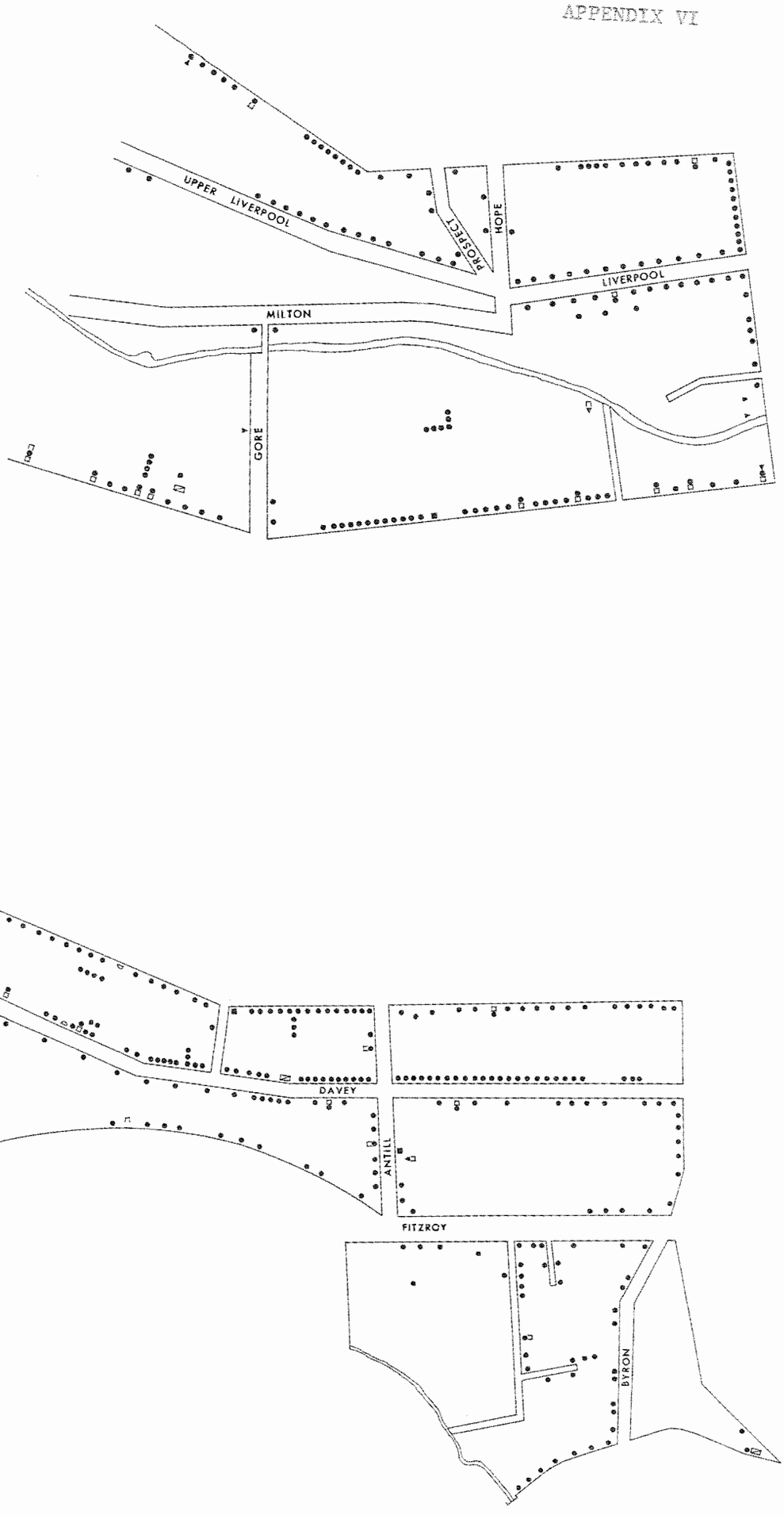
APPENDIX VI





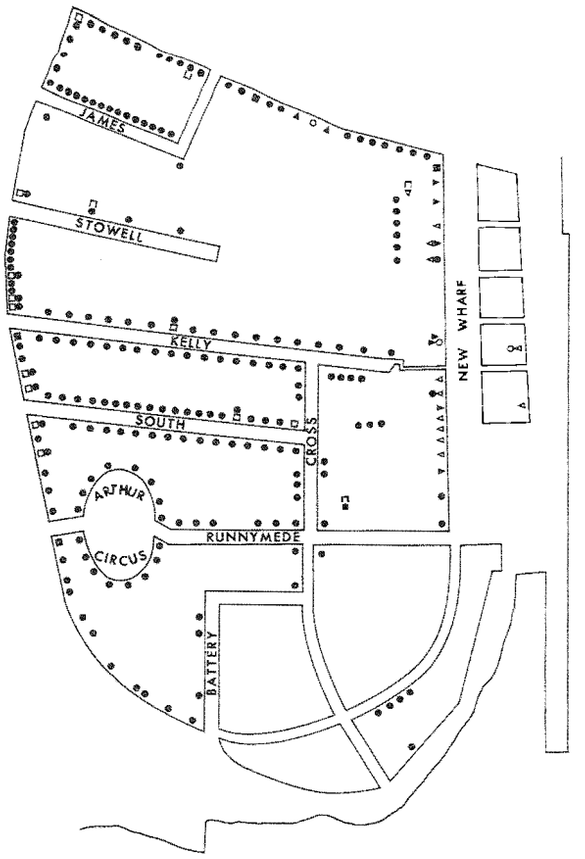
Distribution of functional units in inner Hobart 1901.
Sections 9 and 10.

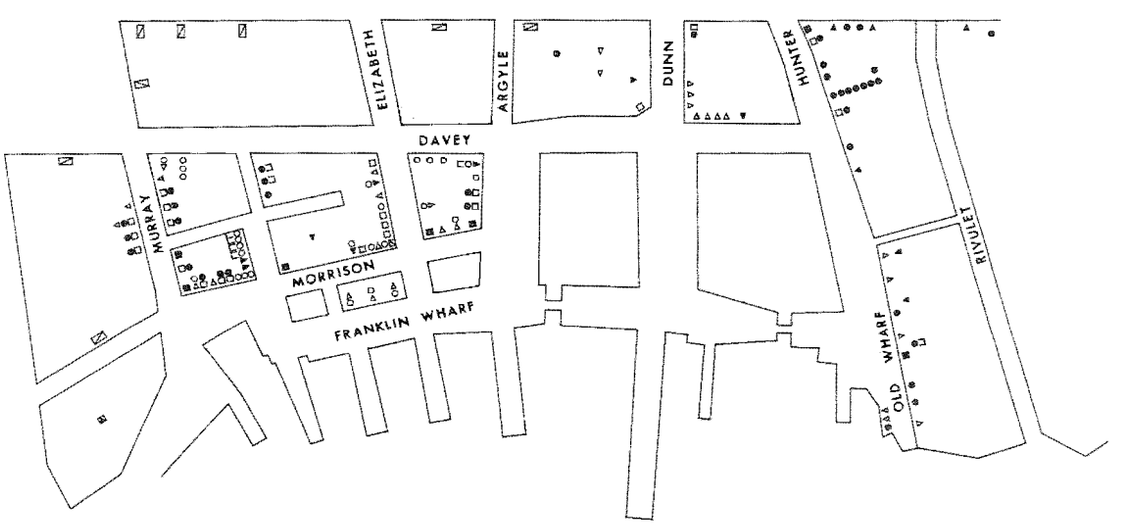
APPENDIX VI



Distribution of functional units in inner Hobart 1901.
Sections 11 and 12.

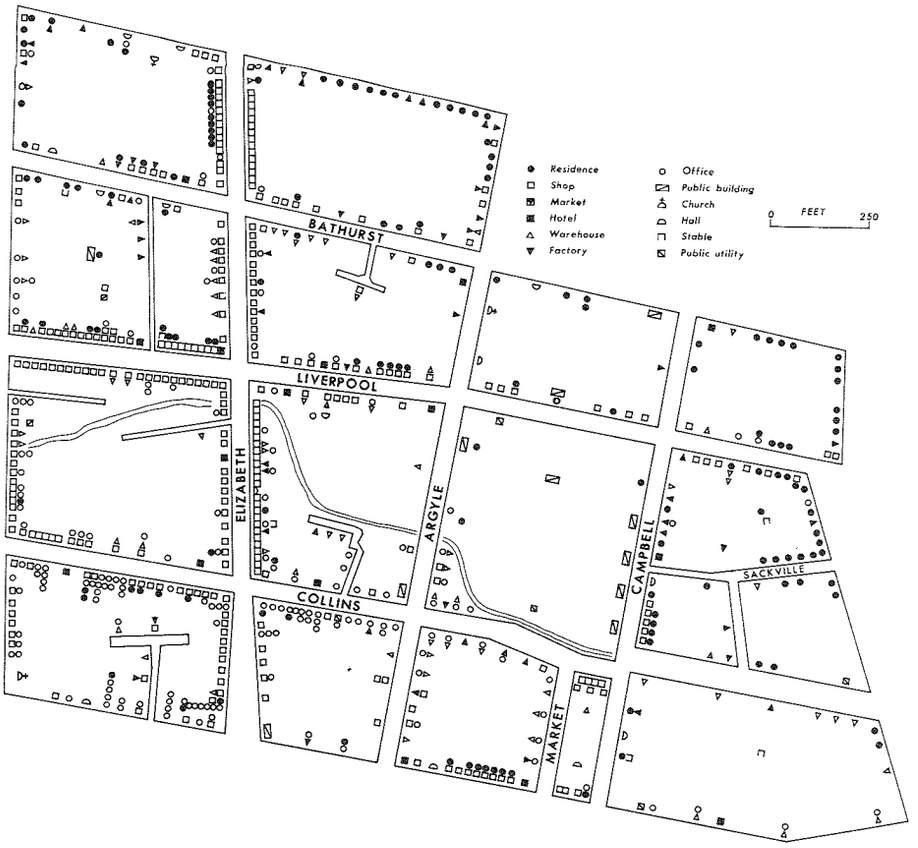
APPENDIX VI

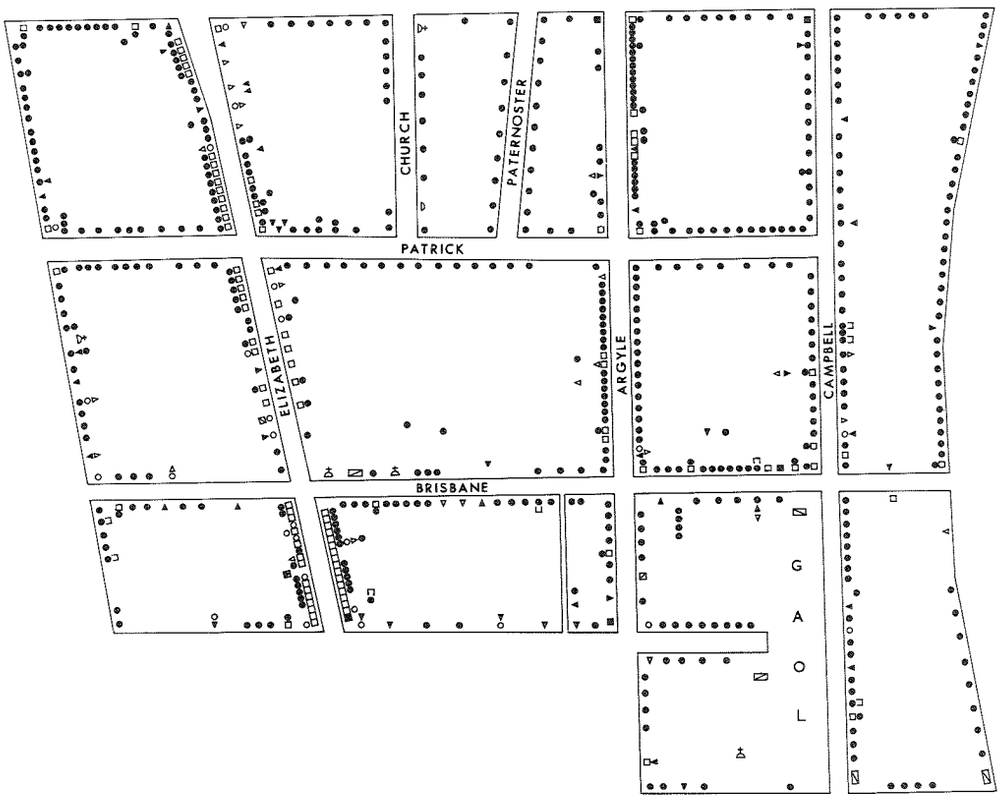




Distribution of functional units in inner Hobart 1901.
Sections 13 and 14.

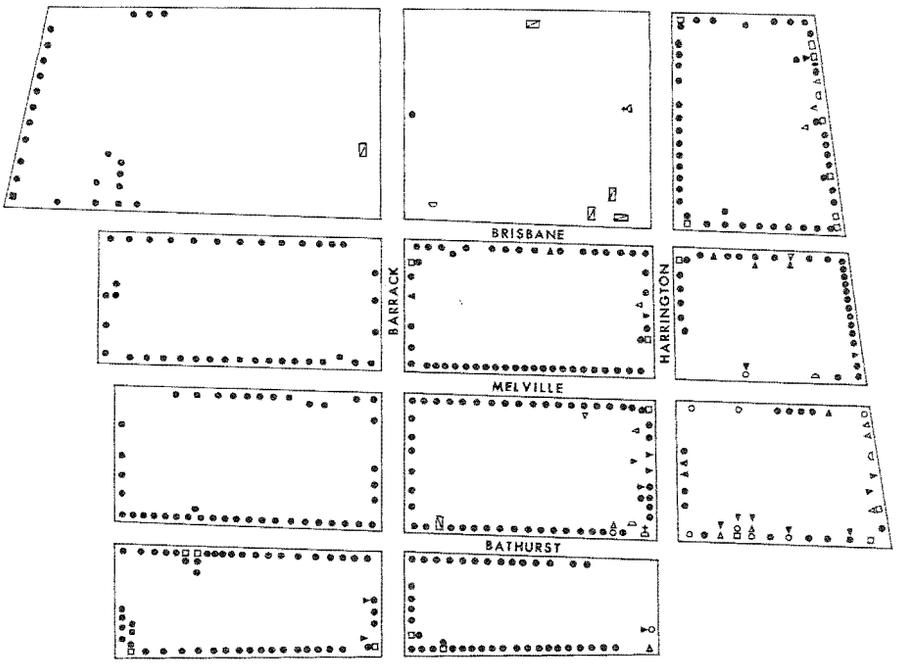
APPENDIX VII

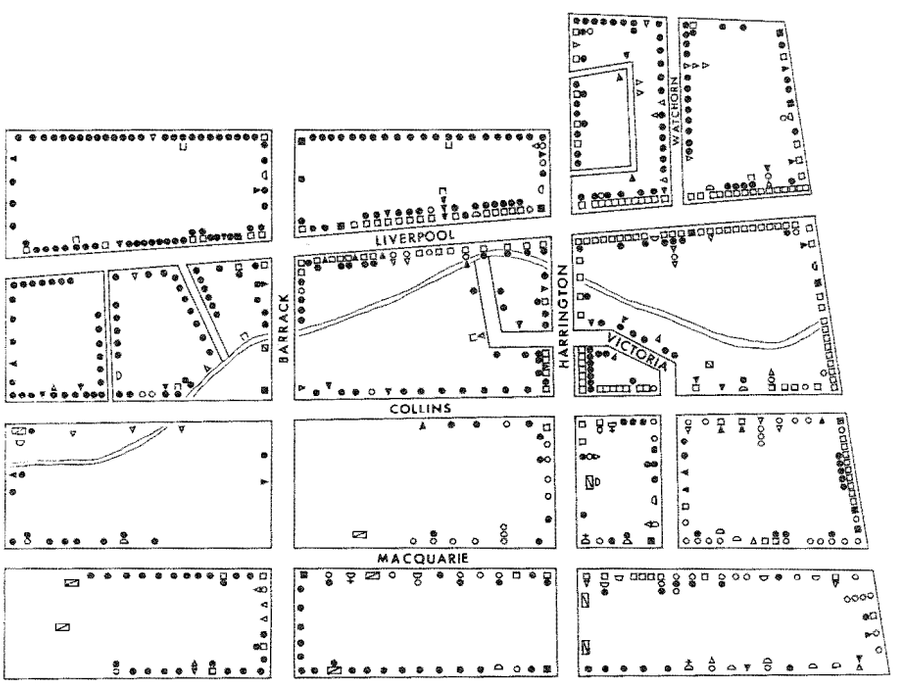




Distribution of functional units in inner Hobart 1954.
Sections 1 and 2.

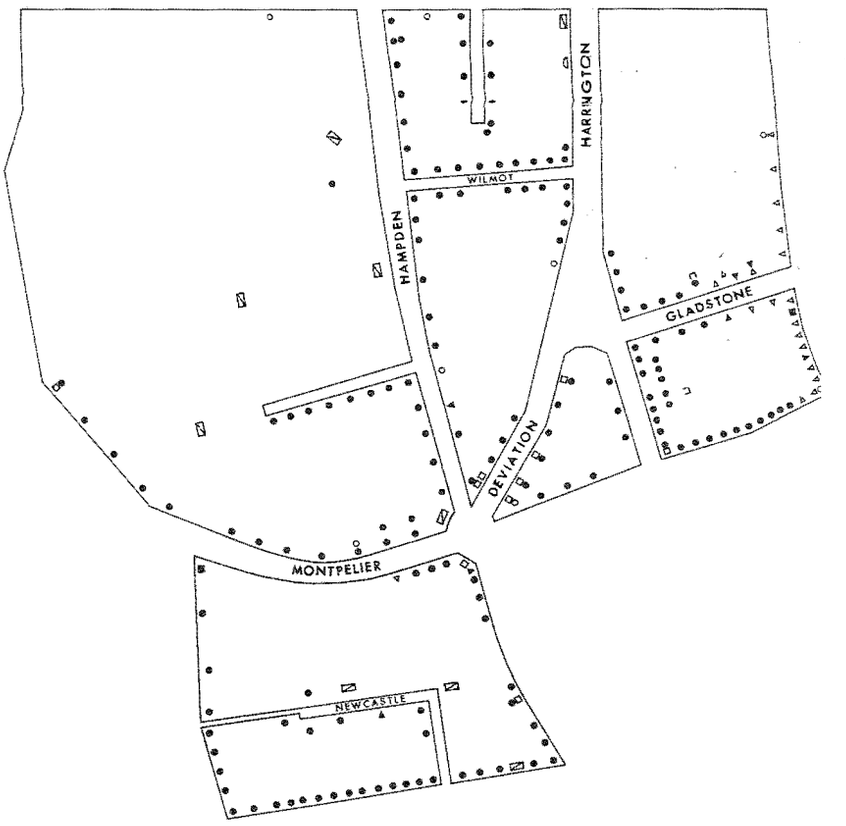
APPENDIX VII

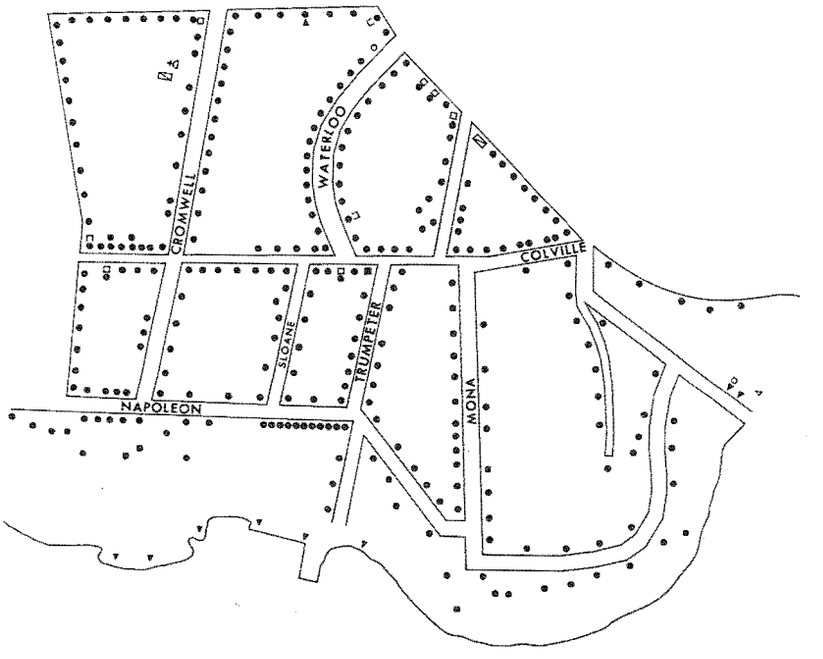




Distribution of functional units in inner Hobart 1954. Sections 3 and 4.

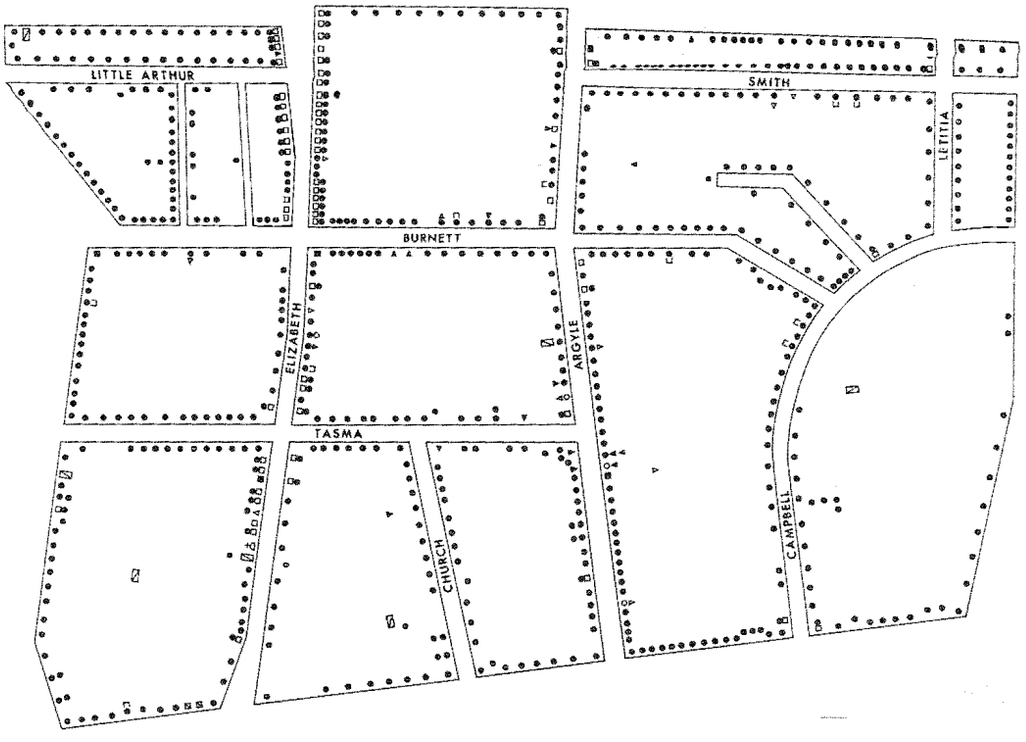
APPENDIX VII

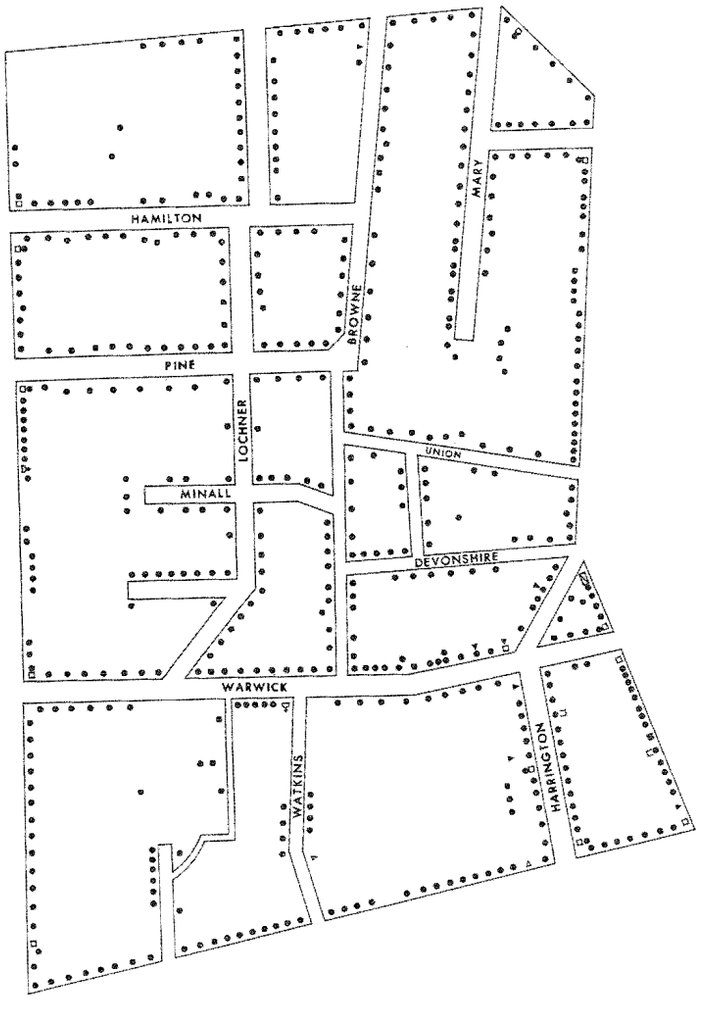




Distribution of functional units in inner Hobart 1954.
Sections 5 and 6.

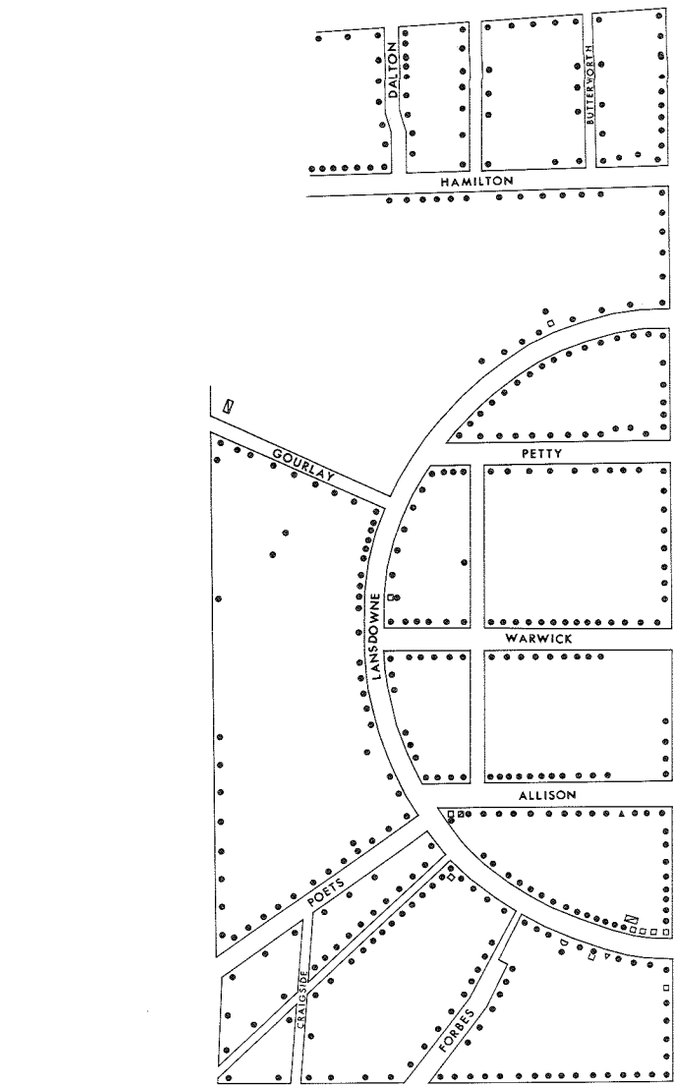
APPENDIX VII

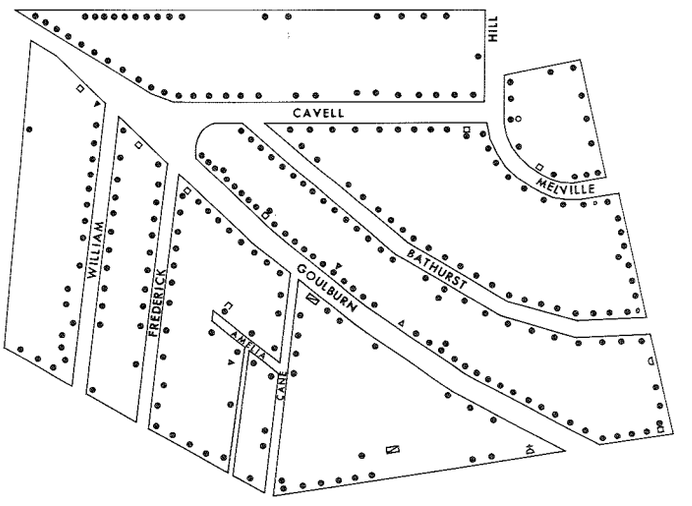




Distribution of functional units in inner Hobart 1954.
Sections 7 and 8.

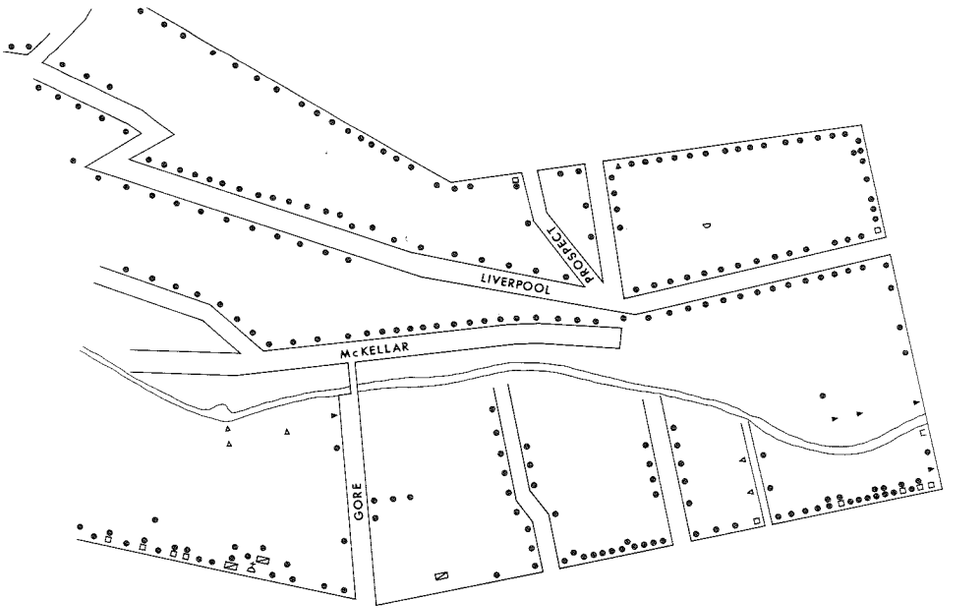
APPENDIX VII

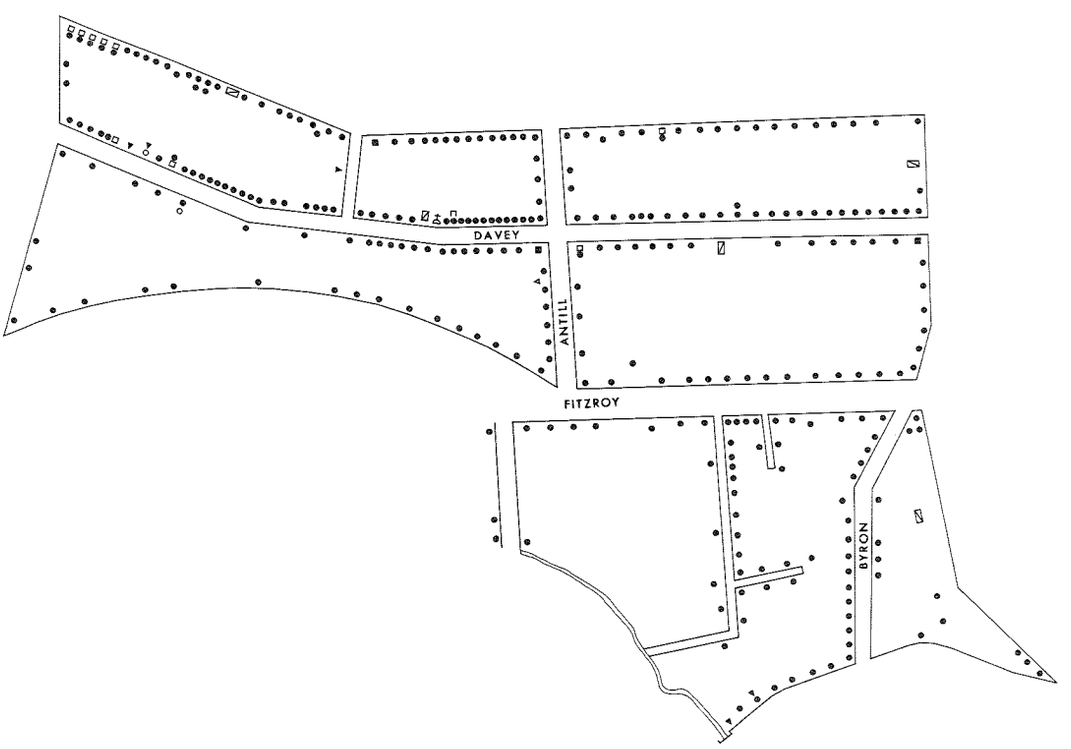




Distribution of functional units in inner Hobart 1954.
Sections 9 and 10.

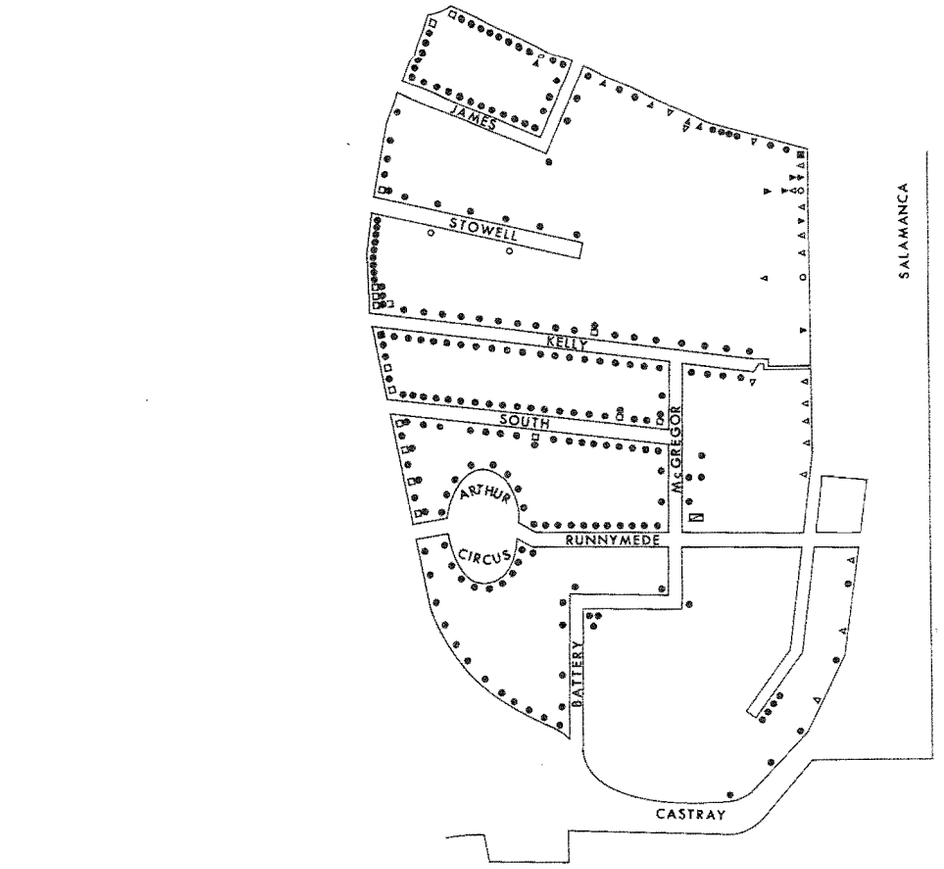
APPENDIX VII

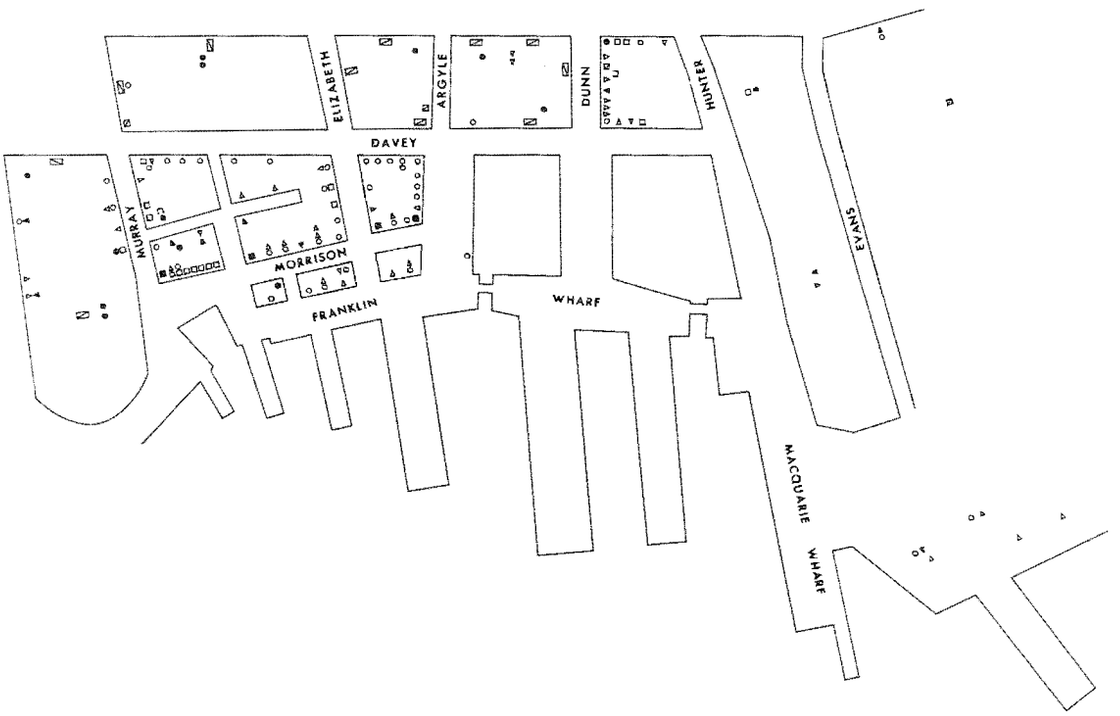




Distribution of functional units in inner Hobart 1954.
Sections 11 and 12.

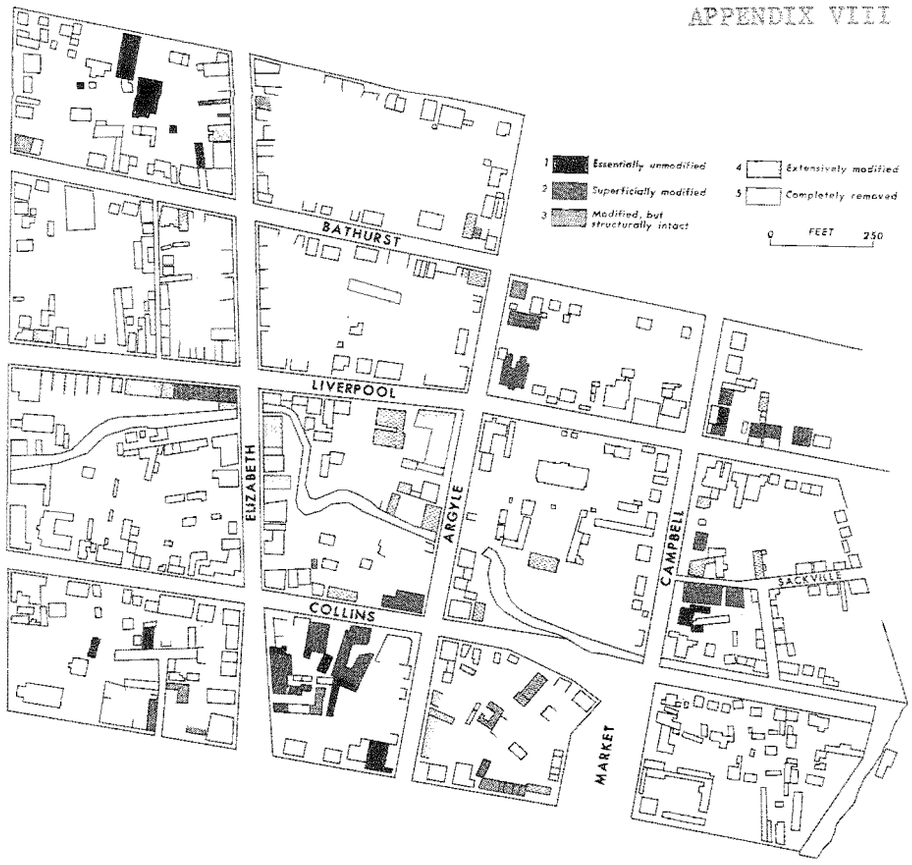
APPENDIX VII

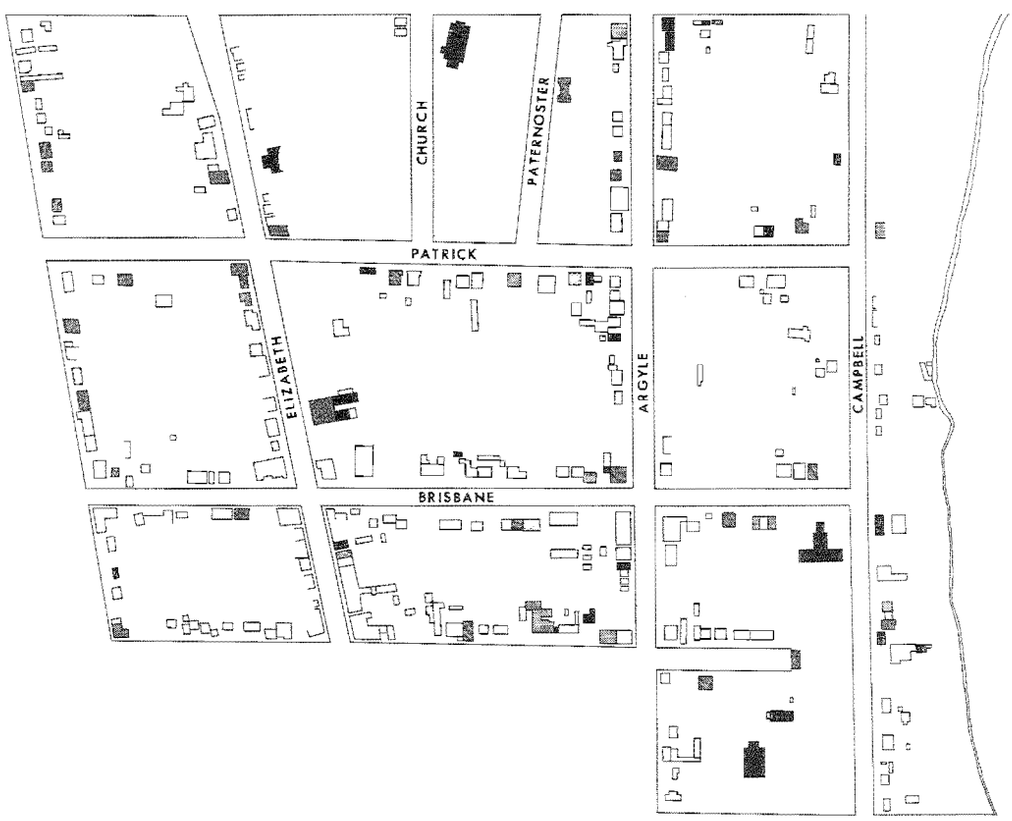




Distribution of functional units in inner Hobart 1954.
Sections 13 and 14.

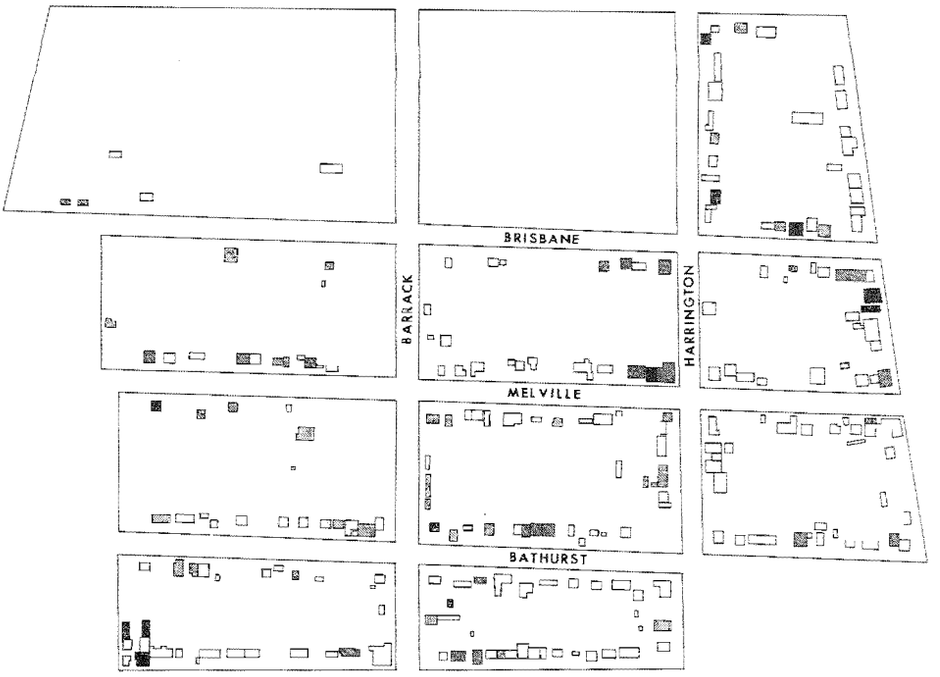
APPENDIX VIII

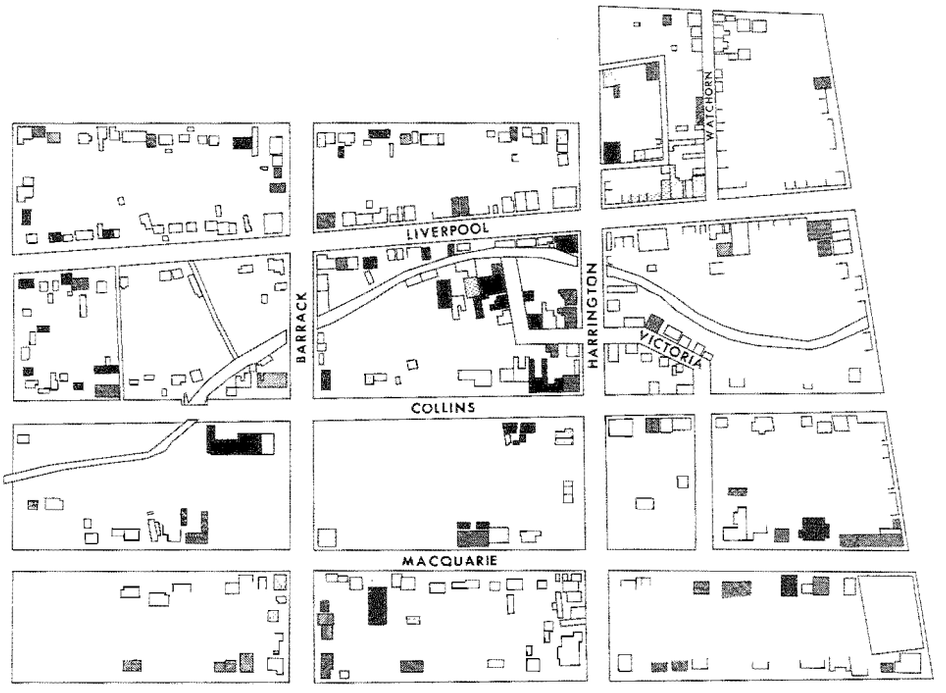




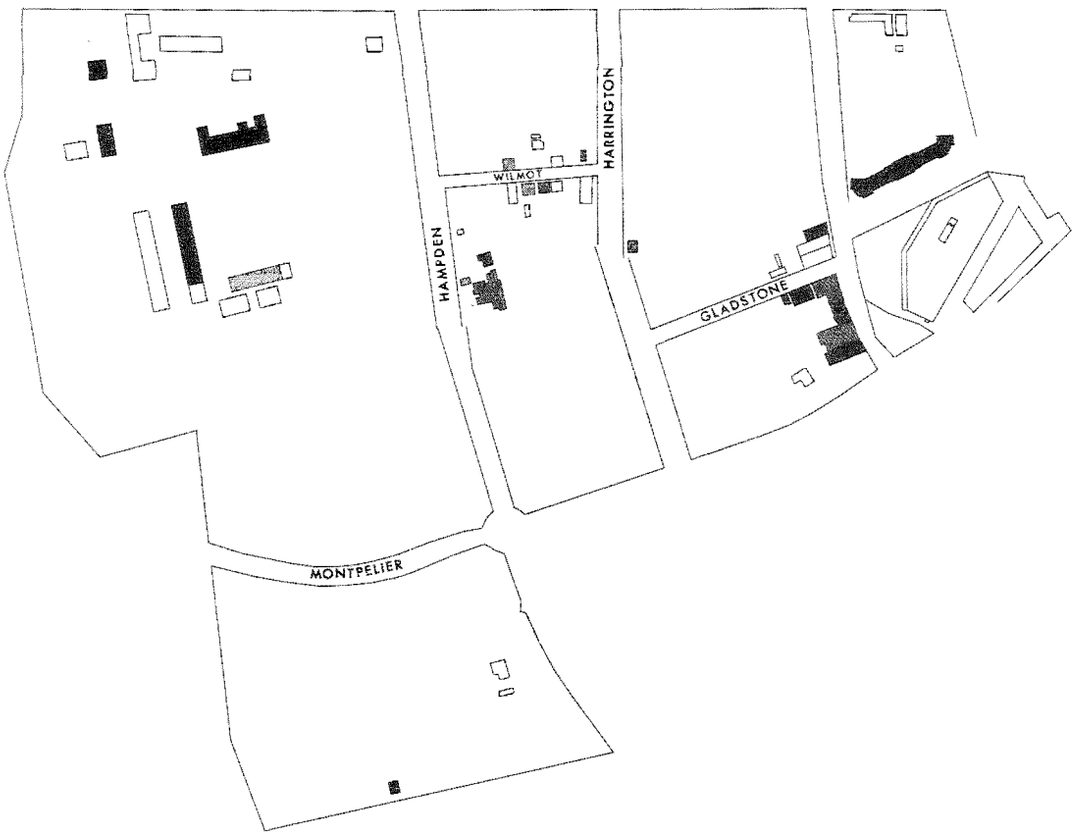
Colonial townscape units of the 1840s in 1962-63.
Sections 1 and 2.

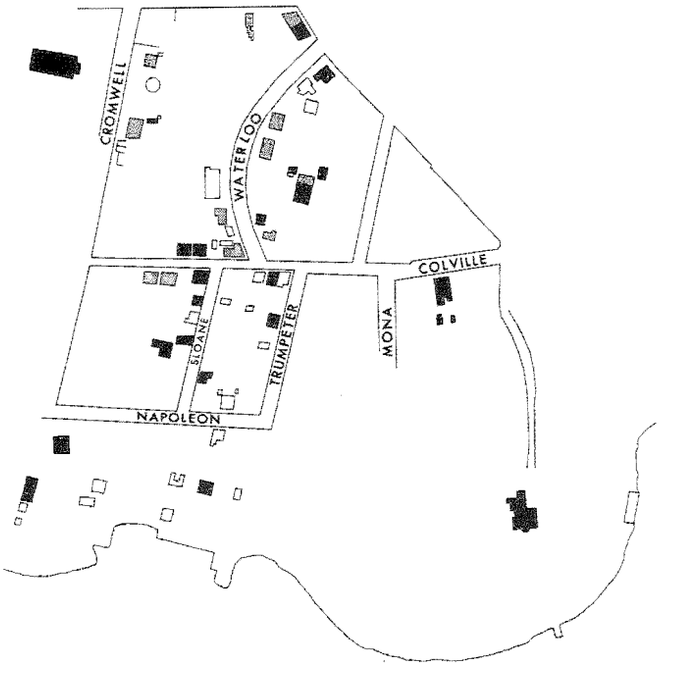
APPENDIX VIII





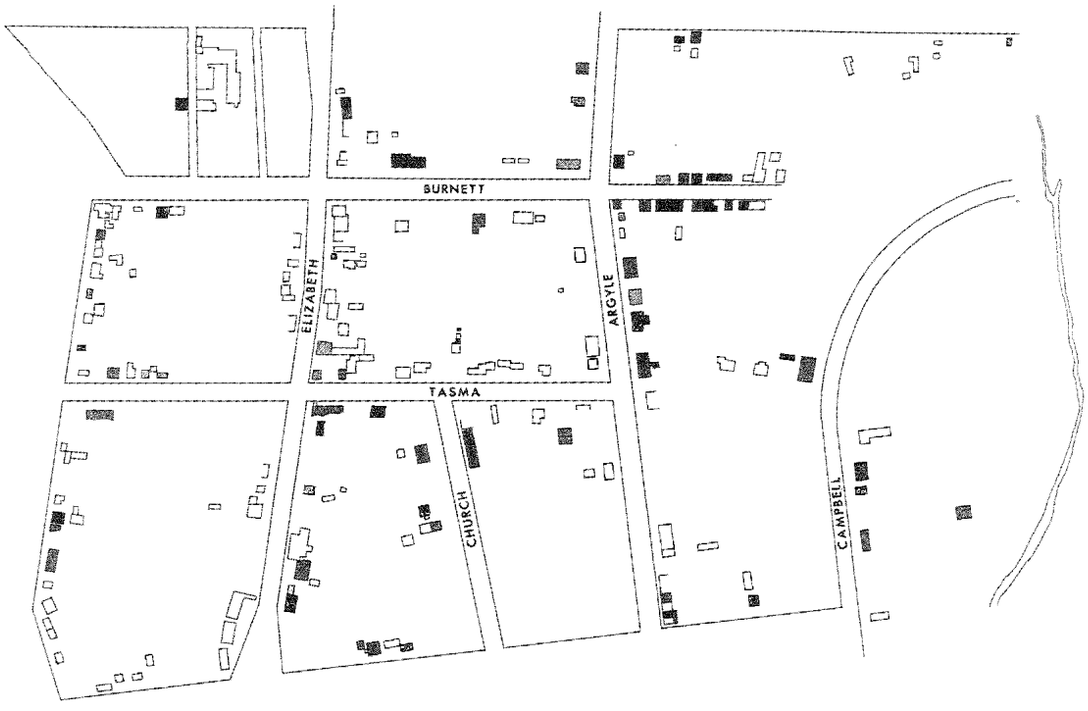
Colonial townscape units of the 1840s in 1962-63.
Sections 3 and 4.

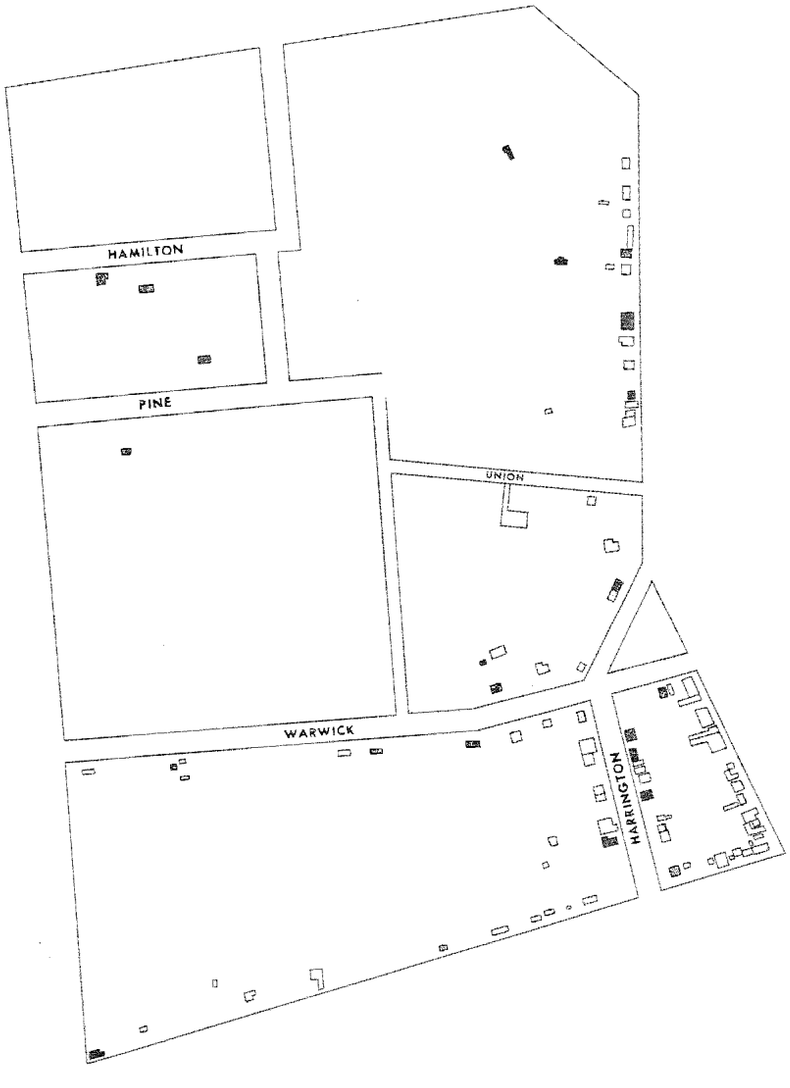




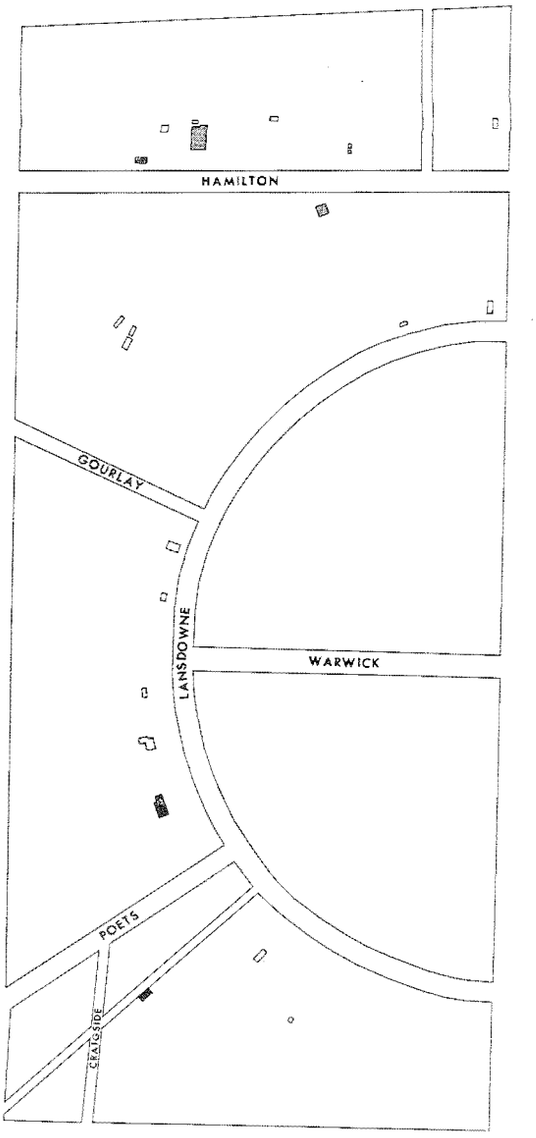
Colonial townscape units of the 1840s in 1962-63.
Sections 5 and 6.

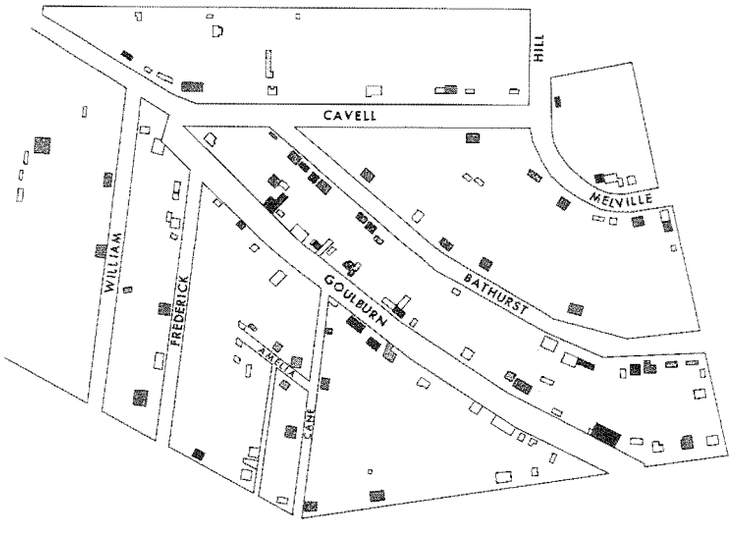
APPENDIX VIII





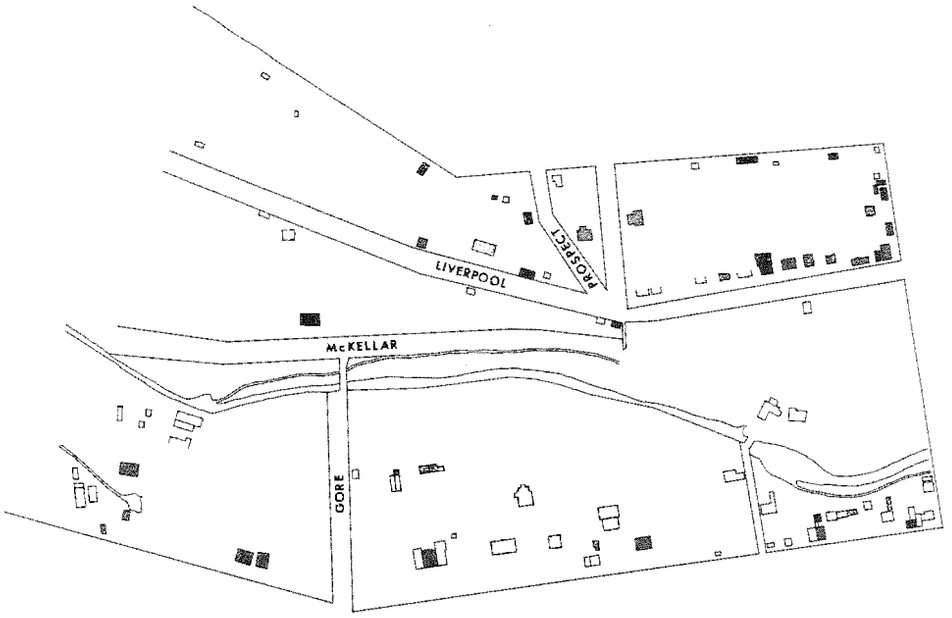
Colonial townscape units of the 1840s in 1962-63.
Sections 7 and 8.

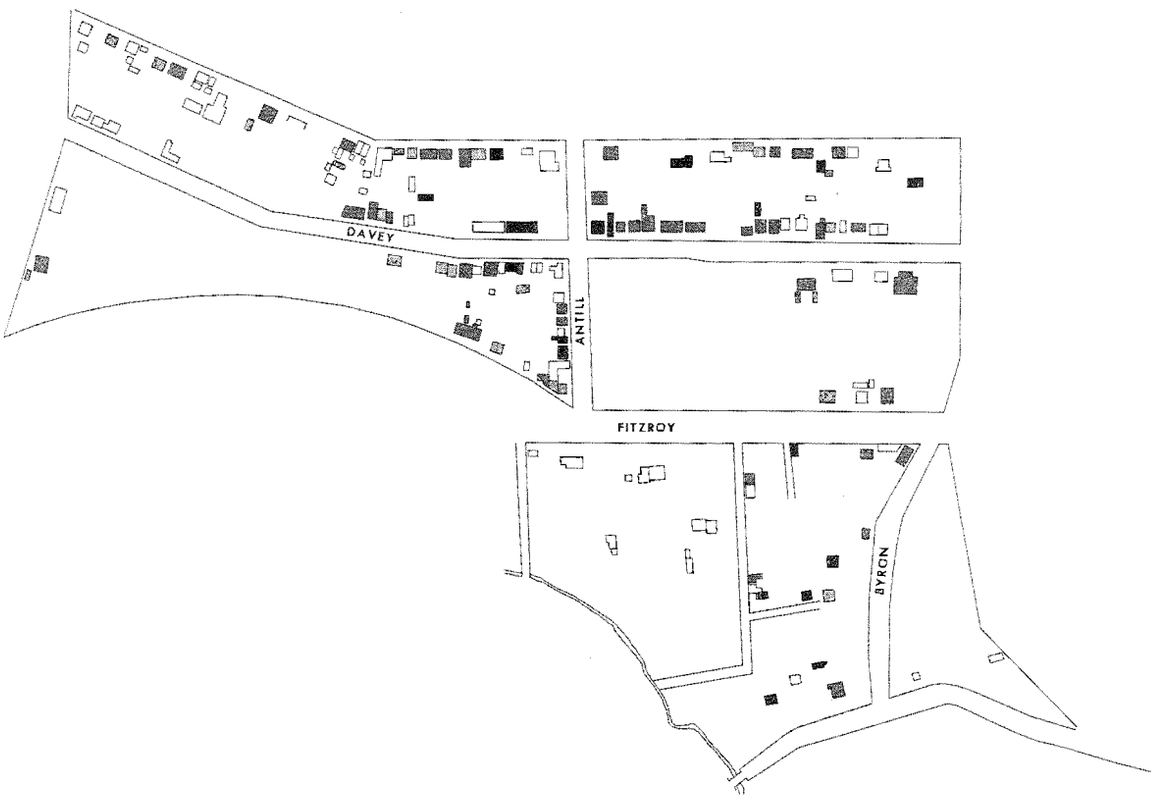




Colonial townscape units of the 1840s in 1962-63.
Sections 9 and 10.

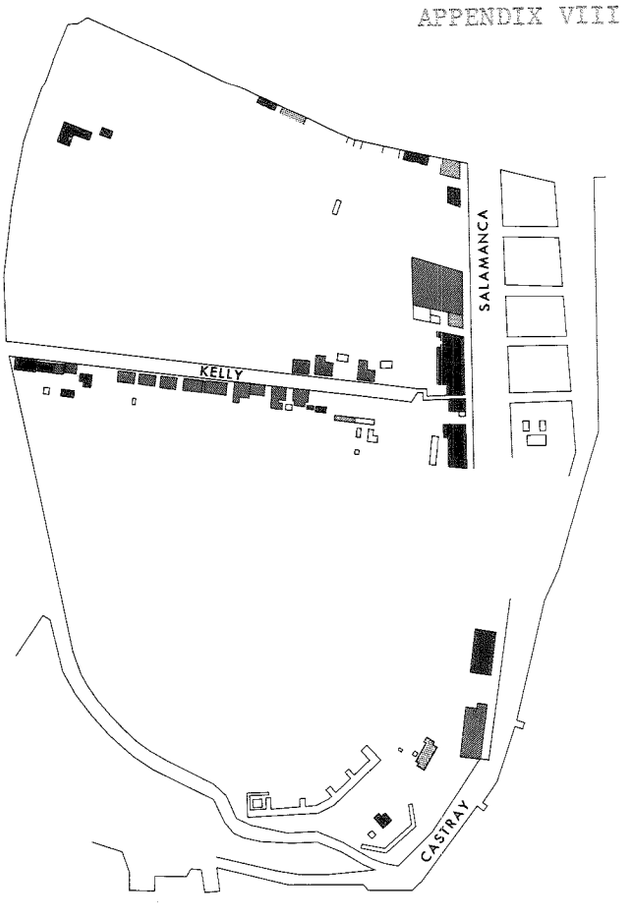
APPENDIX VIII

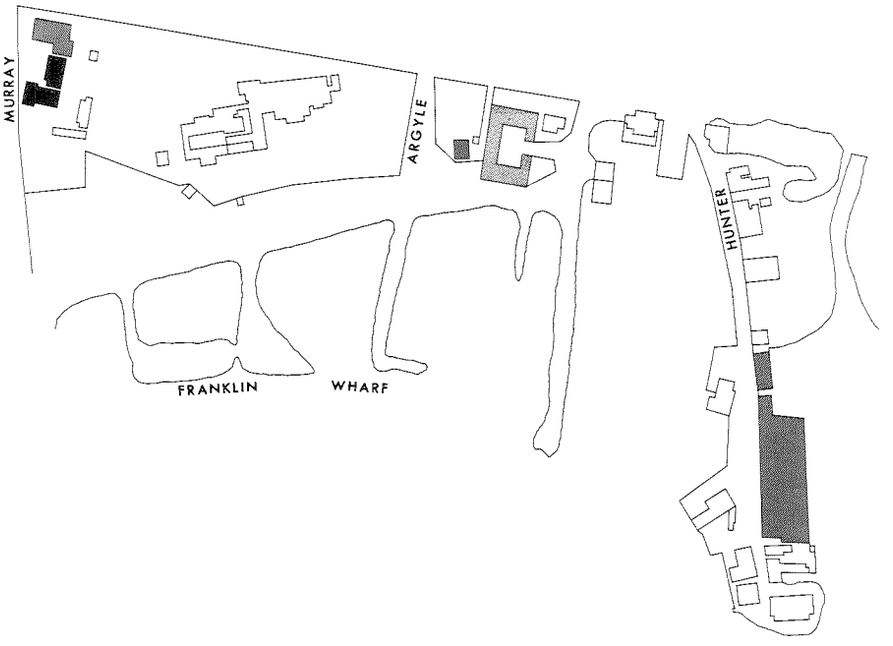




Colonial townscape units of the 1840s in 1962-63.
Sections 11 and 12.

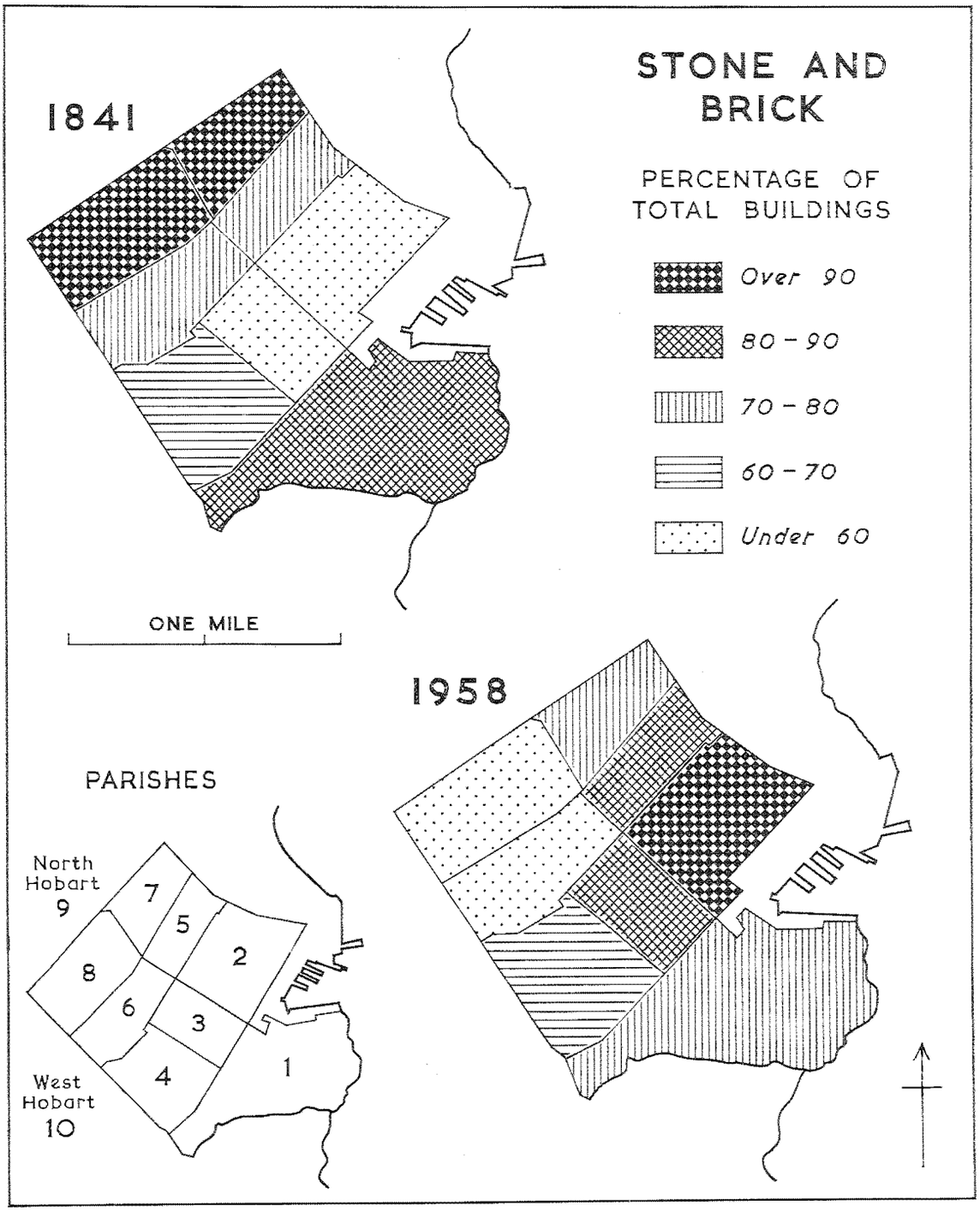
APPENDIX VIII





Colonial townscape units of the 1840s in 1962-63.
Sections 13 and 14.

APPENDIX IX

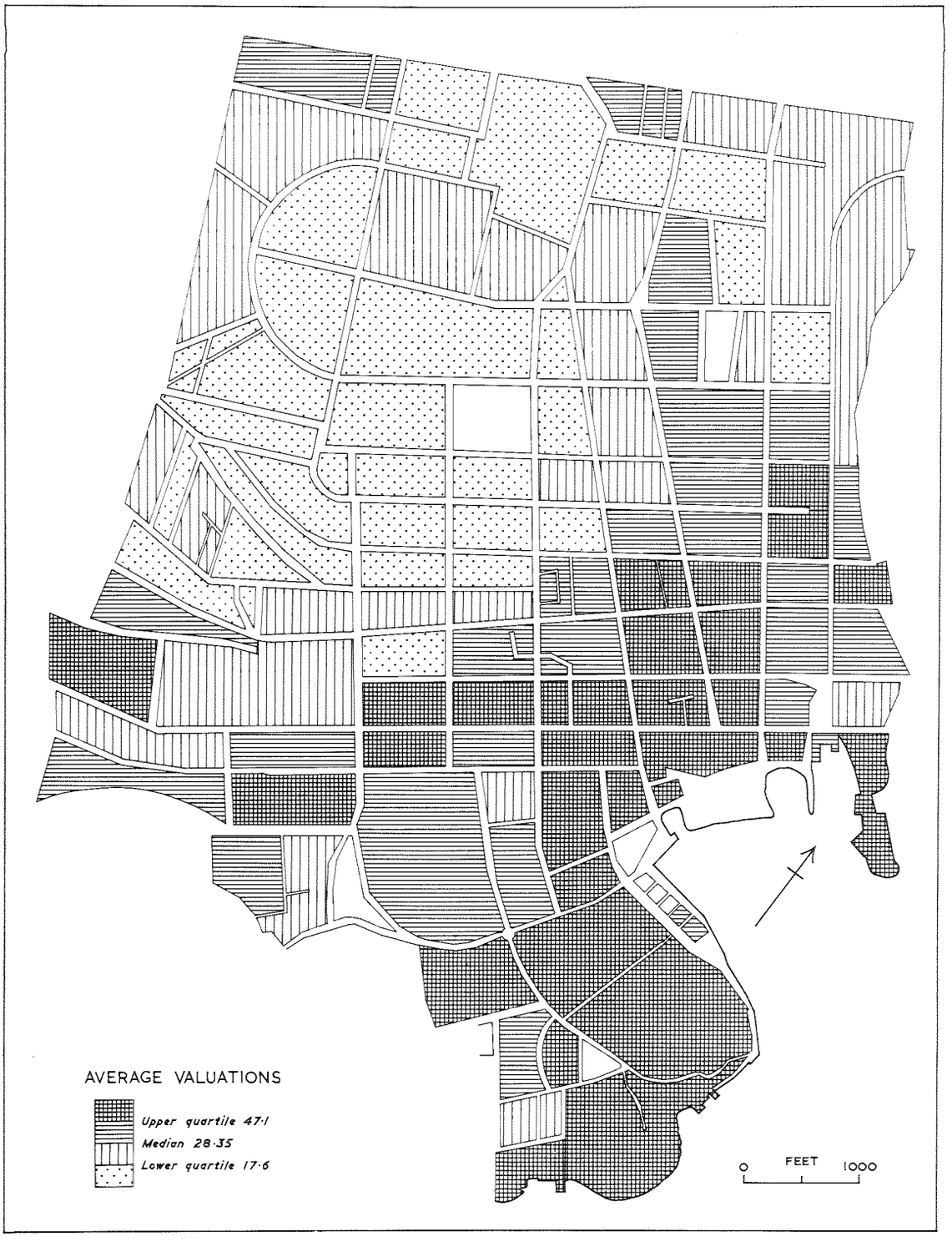


Proportion of buildings in brick and stone, Hobart 1841, inner Hobart 1958 (after Scott).

APPENDIX X

The Sandy Bay farms, c. 1856 (by Butler Stoney).

APPENDIX XI



Distribution of block average property valuations 1847, by quartiles. Values in pounds (Assessment Lists, 1847).

APPENDIX XII

Property Ownership 1847

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
		£			£
Addison, H. & J.E.	19	1222	Burns & White	2	150
Ainsworth, Mrs.	3	260	Brooks, T.	1	40
Aldridge, John	4	295	Barker, R.	1	50
Anderson,-	1	40	Bunster, Wm.	6	498
Armytage, G.	3	306	Brown, R.	6	246
Adams,-	1	20	Bastian, W.	5	151
Alexander,T.	4	80	Belbin, Janus	2	65
Allan, John	1	60	Brown,-	2	55
Addison, J.E.	1	20	Barnes, W.	3	66
Adkins, James	2	30	Butler, G.	23	978
Addison, Mrs.	1	50	Bush, D.W.	4	326
Allen, John	1	20	Butler, Gamaliel	1	220
Aherne, Thos.	2	65	Bell, Captain	1	30
Allen, P.	4	64	Bailey, J. Snr.	3	45
Atkinson, John	2	17	Beaugarde,-	1	23
Abbot, Robt.	1	25	Boyes, Poynter	1	18
Arnott, A.R.	1	30	Birch, John	2	19
Adds,-	1	7	Buck, John	3	113
Archer, W.	2	20	Brown, John	3	69
Andrews, J.	3	51	Bowden (estate)	3	116
Andrew, John	1	50	Baldwin, C.	1	13
Allison, Mrs.	2	140	Baker, J.	4	84
Antigan, W.	1	10	Beal, J.	1	20
Ashton, Mrs.	3	43	Burton,-	1	12
Anderson, J.	3	45	Barlow, John	1	11
Abbott, Chas.	1	50	Brodribb, W.	6	281
Adams, Geo.	2	20	Baynton, Jas.	3	32
Alcock, Thos.	3	120	Bolter, Alfred	2	12
Ainsworth,-	1	15	Barnett,-	2	68
Armitage, Geo.	3	39	Brain, Mrs.	2	20
Allcock, T.	7	116	Best,-	1	12
Brock, H.	10	196	Buckley,-	1	12
Babtie, J.G.	9	354	Brown, James	3	122
Butler, H.	2	90	Brain,-	1	5
Barnard, R.	1	18	Blackham,-	4	26
Bank of A/Asia	1	225	Beamont, John	1	60
Briggs (estate)	1	120	Berkenshaw, J.	1	10
Bank of V.D.L.	2	200	Biggs, Joseph	1	8

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Buckley, W.	1	24	Brown & Douglas	2	95
Barnes, G.H.	1	110	Boadham,-	1	13
Bell, F.	1	80	Burston, C.	1	12
Bridger, Mrs.	1	30	Brim, John	2	21
Bedford, E.P.	2	120	Boothman, Mrs.	4	52
Bateman, Capt.	2	115	Beedham,-	3	24
Boye, John	18	325	Baptist Chapel (trustees)	1	20
Beard, Samuel	1	25			
Brady, P.	1	16	Bryan, E.	2	25
Barrett (estate)	2	42	Bury,-	1	7
Barnard, Jas.	1	105	Beedham, G.	1	18
Bisdee, John	3	175	Burgess, M.	2	40
Bury, W.	6	90	Bahtie, B.	3	38
Brice, F.	1	25	Baldwin, Mrs.	2	23
Bennison, R.	4	60	Bank, Commercial (Bank Directors)	1	150
Brest, Mrs.	1	20			
Bell, John	2	40	Bank, Derwent (Directors)	1	150
Bowden, Mrs.	9	83	Bank, Union (Directors)	1	150
Burrows, Mrs.	1	13	Chamberlain, W.	2	33
Blackman,-	2	46	Cooke, Samuel	2	52
Blackman, J.	2	60	Carter, W.	3	365
Brown, J.	17	233	Crowther, Dr.	1	100
Bowden, A.J.	1	10	Chapman, T.D.	1	200
Bates,-	1	13	Cresswell, W.	5	175
Bowden, Mrs. (estate)	4	133	Crombie, A.	1	100
Blackhall, W.	4	36	Clues, Wm.	1	200
Boot, Thomas	1	50	Carter, Jas.	1	110
Branscombe,-	2	52	Cummins,-	1	10
Bowtell, Jesse	4	73	Clarke, W.	1	19
Bell,-	1	13	Carling, W.	1	20
Brown, Thos.	2	90	Cook, Mrs. Jane	3	135
Blackburn, Mrs.	1	52	Crisp, Samuel	6	113
Bye, H.	1	60	Cleburne, R.	5	322
Boyes, John	1	80	Cleary, Wm.	9	117
Bosward, J.	2	55	Clark, W.	1	16
Bird, D.	1	40	Clarke, Philip	1	8
Bell, J. & Wilson	1	20	Collins, Wm.	1	10
Brown, W.C.	6	113	Carson, Simon	1	7
Bryant, J.M .	4	163	Carter,-	5	110
Beechcroft, Capt.	5	520	Calder,-	1	26
Butler, E.P.	1	26	Chandler, J.	1	3
Bonney, H.	4	178	Crouch, J.T.(trustee)	1	10
Burgess, H.	6	270	Chapman, T.	1	15

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Carmichael, Jas.	1	10	Conliff,-	2	26
Campbell, Geo.	8	88	Cooke, Mrs.	1	15
Carter, Mrs.	3	100	Clarke, G.C.	2	215
Clarke, David	1	16	Degraves, H.	3	128
Cash, Mrs.	11	139	Downing, F.A.	2	108
Collinwood,Mrs.	1	10	Dawson, W.	9	197
Clare, -	1	9	Davidson, A.	1	290
Clarke, Capt.	4	68	Dunkley, David	16	532
Cooke, T.W.	1	15	Davies, Lieut.	1	50
Chase, Mrs.	3	95	Dood,-	3	82
Chamberlin, W.	1	26	Davis,Samuel	1	18
Cotton, W.	3	56	Doyle, J.	1	5
Cowle, T.P.	9	254	Davis, Mrs.	4	28
Champion, Wm.	1	125	Dexter, Geo.	9	260
Case, H.	4	58	Drinkwater,W.	1	9
Cleghorn, John	3	59	Dossiter,-	1	10
Chapman, H.	4	163	Dowson, Michael	4	168
Crossland,-	5	109	Dodd, John	4	59
Cutmore, Jas.	2	35	Dixon, J.M.	1	50
Carmichael, W.	1	59	Degraves, Peter	2	190
Clinch, Capt.	3	39	Davis, Thomas	5	52
Corker, Mrs.	1	15	Dossiter, W.	4	168
Cook, J.	1	26	Dove, W.	5	181
Coombs, S.	7	370	Dalgleish, W.	1	18
Cook, Samuel	3	78	Drew, P.	3	36
Cains,-	7	200	Davenport, W.	2	14
Crowder, Mrs.	1	120	Davenport,-	1	15
Cox, C.	2	170	Day, C.	1	10
Cook, W.	2	56	Dunn, John	12	617
Clarke, W.J.T.	1	36	Dennett, W.	1	12
Crump, Wm.	1	50	Doyle, Mrs.	1	10
Clayton, John	2	28	Danby, W.	9	146
Clayton,-	3	46	Dillon, Adam	2	38
Clarke, John	1	10	Daniels, H.	1	15
Collins,-	6	47	Dennett,-	2	73
Coombes, S.	1	30	Dorman, H.	1	15
Campbell, Peter	1	15	Drummond, R.	5	148
Chard,-	1	7	Dixon, Edward	1	100
Collins, Martin	5	97	Doig, John	2	40
Cox, C.	3	126	Dawes, Thos.	1	35
Carter, Henry	1	12	Doyle, Catherine	1	15
Currie, Hugh	3	57	Duncanson,-	2	55

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Dudgeon, P.	1	13	Friedman, J.	21	309
Denne, W.	1	30	Ferguson, Joseph	1	30
Edwards, D.	1	18	Frappell, W.	4	41
Easby & Robertson	2	145	Fisher,-	3	27
Elliott, John	6	231	Ferguson, Dan	2	20
Everett,-	2	28	Friends (Society of)	2	45
Everett, Robt.	1	15	Fox, H.	1	45
Everett, Samuel	2	17	Flegg, W.	2	160
Ellis, James	3	44	Flexmore,-	9	81
Easton, W.	1	25	Fisher, E.	1	18
Evans, Michael	2	43	Greig,-	4	102
Edgar, F.S.	4	112	Government	32	4534
Eddington, John	5	425	Ouest (Mrs.)	5	192
Ellis, Mark	4	61	Gardiner, A.	3	120
Elliott, Mrs.	2	32	Grant, J.	4	215
Elliston, W.G.	1	250	Grimsey, W.	8	204
Everall, John	2	44	Gee, E.	2	165
Eason, John	5	168	Gaylor, Chas.	13	568
Everett, Patrick	1	10	Gay, Thos.	1	28
Earle, Mrs.	4	48	Gardiner, Capt.	1	40
Easton, John	1	20	Gellie, A.	1	60
Facey, Mrs.	1	100	Goulston, W.	1	40
Frazer, A.	1	200	Green, Geo.	1	25
Fox, Anthony	8	295	Grubb, H.	3	48
Fisher, John	20	672	Gardiner,-	4	45
Foster, John	2	200	Gilbert, N.	3	120
Fisher, Thos.	8	183	Gloster, J.	4	144
Foord, William	13	368	Gaylor, G.	1	40
Ferguson,-	3	27	Griffiths,-	5	130
Firth, J.	1	15	Garrett, Mrs.	1	40
Flegg, C.	5	88	Green,-	10	124
Fisher, Mrs.	1	55	Guy, B.	2	75
Fisher, Wm.	3	66	Gilbert, E.	1	20
Fry, Rev.	1	65	Gillon, John	1	12
Furley, F.	4	90	Goodwood, Jacob	1	13
Furley, Sam.	2	15	Graff, Ernest	1	18
Fright, G.	1	20	Goldie, D.	1	15
Fleming, Richard	1	18	Giffney, Mrs.	1	16
Fox,-	1	14	Gunn, William	4	134
Featherstone, J.	2	68	Gatehouse, Edith	1	65
Ferguson, Joshua	3	70	Gill,-	1	26

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Goodwin, James	5	58	Harper,-	1	38
Griffiths, R.	1	30	Hunt, James	1	7
Griffiths, W.	3	66	Harrison, S.	3	35
Grant, Geo.	4	98	Heywood, Sam.	1	25
Gardner, Capt.	1	20	Horne, Thos.	1	80
Gibbons, H.	1	18	Hales, Qr. Mr.	2	100
Gerrand, J.(estate)	2	230	Hone, Joseph	1	60
Gordon, Hugh	1	20	Haley, Benjamin	4	38
Good,-	1	15	Hill, Barnett	2	28
Giles,	2	22	Harvey, P.	3	42
Hopkins, Henry	15	818	Hinds, J.	1	20
Harris, J.	6	277	Harmond, W.	2	25
Hodgson, E.	2	230	Houghton, A.	1	15
Hurst, Richard	18	275	Hurst, H.S.	9	189
Heath, W.	2	110	Henry, Robert	2	30
Hamilton, W.	3	300	Hugo, E.N.	1	10
Hewitt, T.	1	40	Horton, Joseph	1	10
Hopkins, Thomas	1	60	Hartley, W.	4	103
Holland, Mrs.(est.)	1	40	Hay, John A.	2	50
Hempsell, J.	1	12	Hoggins,-	2	24
Harris, W.	18	641	Hill, Mrs.	1	20
Hogg, D.	1	30	Hood, Robin	5	174
Harbottle, Thos.	5	283	Hollick,- (estate)	5	86
Hoy, D.	1	30	Hutton, Geo.	4	92
Howe, E.	3	101	Hanger, Sam.	2	35
Hunt, Geo.	3	213	Hiddleston, John	2	66
Hurst, James	2	14	Hardwick, W.	3	66
Howard, Edmund	12	292	Hole,-	2	42
Hyams, Israel	9	195	Hume, James	2	205
Harder, Thos.	1	13	Henderson, David	4	112
Hayward, Sam.	1	35	Horner, F.	1	50
Hibbert, John	2	16	Hay & Ivey	2	200
Holdship,Mrs.	1	12	Hugo, E.	1	100
Holdship,-	4	28	Hudson, J.	1	15
Hepburn, T.	1	7	Hewlett,-	5	59
Hackett, C.	3	75	Hazon, H.	1	50
Handley, Mrs.	1	7	Hedditch, Eliza	5	254
Hill, Richard	2	43	Hyams, J.	1	100
Howe, Thos.	1	9	Hoskison,-	1	20
Hutson, John	6	60	Hewgrove, Mrs.	1	15

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Hart, R.	1	18	Kirk, Mrs.	2	68
Hanning, W.	1	15	Logan, R.	3	45
Ikin, Thomas	1	26	Lowe, B. (trustees of)	1	32
Ingle, John	4	540	Lord, David	27	2027
Insley, W.	1	60	Lindsay, Wm.	37	2082
Ibbotson, Mrs.	1	26	Lucas (estate)	2	110
Innes, J.	1	35	Lakeland (estate)	1	95
Independent Trustees	1	40	Lowes, T.Y.	6	206
Infant School C'tee	2	37	Lester, Joseph	12	485
James, John	30	1792	Lawrence,-	8	245
Johnston, J.	8	215	Lucas, James	4	83
Jackson, J.	44	2178	Latham, Mrs.	1	40
Johnson, Thomas	1	100	Lovett, Capt.	1	70
Jones, W.	1	7	Logan, D.	2	60
Jarvis, Geo.	1	20	Lyons, H.	7	77
Jones, Mrs.	3	126	Latham, G.H.	7	213
Jennings, J.G.	3	143	Lyndsay, W.	1	15
Jones, R.	2	55	Lewis, Mrs.	1	36
Jeffery, Robt.	2	61	Lacey, J.	5	53
Johnson, T.	1	80	Lockwood, J.	2	24
Johnson,-	2	39	Lawrence, John	1	12
Jefferies,-	1	20	Lipscombe, F.	1	15
Jones, Mary Ann	1	35	Lewis, Gidley	1	12
Jones, A.	1	20	Ladds, W.	1	6
Jacomb, R.	5	225	Ladds, Martin	2	27
Johnson, John	1	130	Lowe, Geo.	12	368
Jostage, J.	1	7	Lewis, R.	7	335
James, Edward	3	23	Lucas, M.	1	40
Jarvis, J.	1	20	Lambert,- (assignee of)	1	80
Jennings,-	6	90	Lloyd, Mrs.	3	55
Jennings, J.	3	30	Lewis, John	21	324
Kearney, W.	1	36	Lucas,-	2	40
Kramer, Augustus	7	296	Lewis & Sons, Rich.	1	350
Kelcey, R.	1	50	Lovell, Esh	8	185
Kerr, J.	1	100	Loring, Sam.	2	220
Kerr, Bogle & Co.	2	155	Luckman, J.	2	142
Knight, W.	3	280	Lear, Isaac	1	80
Kelly, D.	26	420	Lord, J.	2	420
Knight, T.J.	1	50	Lear, William	9	346
Knight, Mrs.	1	13	Lyons,-	1	15
Kelly, W.	1	30	Lumsden, Jas.	1	30
Kearney, W.	1	20	Lodder, Mrs.	1	60
Kevill, R.	2	52	Lavac, Ernest	1	10

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
McWilliams, Mrs.	2	23	McPherson, D.	2	70
McGuinness,H.	2	58	Milligan, Dr.	1	60
Mansfield,-	1	23	Moodie, Jas.	20	249
Mason, W.	1	19	Midwood, C.	2	30
McCracken, J.	2	58	Morgan, W.	1	25
Moses, Mrs.	3	105	McGuire, H.	1	10
McLachlan, C.	11	884	Meikle, J. & R.	2	95
Murdoch, P.	2	145	Mansfield, J.	1	13
Morgan, John	16	545	Murphy, W.	1	10
Milne, Mrs.	3	145	Macraw,-	1	5
Murray, Robt. L.	3	91	Marshall, H.	6	111
Moodie,-(estate)	1	150	Maxwell, T.	1	20
Morrison, Askin	4	450	MacGregor, J.	1	18
McGrath, John	1	90	McKay, D.	2	29
McNaughten, A.	1	60	Mulhall, R.	2	20
McLeod, A.	1	45	Macloughlin,-	4	39
Moore, F.	4	186	Milne,-	1	18
McCarthy, Capt.	1	30	Marshall, J.	1	9
Marr, P.	1	35	Mackay, D.	1	18
Mason, Thos.	2	92	Martin, J.	2	14
Molle, E.	1	10	Marshall, W.	14	153
McWilliams, R.	1	15	Miller, J. (estate)	1	35
Marks, Philip	1	20	MacDonald, C.	1	20
Moir, Joseph	11	318	McKay, Capt.	1	60
Mitchelmore, E.	3	80	Manning,-	2	46
Murray, Wm.	2	120	Miles, Mrs.	1	40
Mytton,-	1	11	MacDonald, A.	1	50
Mills, H.	7	128	Murray, John	1	30
Munro, Mrs.	1	4	Mather, R.	1	30
Maguire, T.	5	108	Marney, John	3	43
Maguire, Michael	8	75	Milward, John	1	80
Maguire, P.	8	67	McCabe, Patrick	14	251
Maher, H.	1	18	McRobie, J.	2	85
Montgomery, W.	3	60	Mumford, Mrs.	3	45
MacGregor,-	1	25	Miller, Capt.	1	30
Mazger, John	6	290	Mottom, James	1	15
McGrath, Dan.	2	31	McCabe, J.	3	48
McRobie, Wm.	1	150	McLoughlin, John	1	80
Maclean, Com.Gen.	1	200	Murphy,-	1	70
Markham, Col.	1	70	Marsh, H.	3	87

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Maddocks, Sam.	1	50	Oakley, Mrs.	3	110
Maclaren, Jas.	1	52	Oldham, Peter	13	344
Maguire,-	1	10	Orford, G.	2	45
McLeod, Mrs.	2	28	Orr, Alexander	1	250
Moore, Edward	5	194	Orr, Mrs. W.M.	1	120
McFarlane,-	1	52	Overall, W.	3	74
McLaren, Joseph	3	45	O'Nara, Michael	1	15
Munro, J.	1	10	O'Nara, P.	1	26
McConnell, John	3	60	O'Meagher,-	1	50
Martin, Mrs.	2	56	Orford, R.	2	30
MacGregor, D.	3	70	O'Connor, Peter	1	26
Moses, D.	6	470	Osborne, W.(estate)	6	297
McCann, Mrs.	7	239	Officer, Robt.	1	85
Morgan, Joseph	3	93	O'Byrne, Mary	1	20
Maycock, Jas.	1	39	Orborne, Bros.	3	37
Maycock, Amelia	1	39	Pitt, F.	1	50
Moller, Thos.	1	40	Pender, W.	5	95
Mason, John	7	162	Pitcairn, Robt.	1	55
Maddox,-	1	15	Perry, Arthur	5	187
Mitchell, Sarah	1	15	Pulfor,-	2	41
McBride,-	3	45	Poole, D.	1	13
McSheen, C.	5	124	Priest, Thos.	8	202
Montgomery, Mrs.	1	26	Petrie, John	1	40
Moore,-	1	15	Paisley, John	4	76
Mitchell,-	1	13	Panton, J.	1	7
McShane, C.	1	25	Probyn, Mrs.	2	35
McCann, M.	1	28	Powell,-	4	93
Margetts, Mrs.	1	70	Priest, James	5	280
Manning Bros.	1	140	Pynter, J.P.	2	160
Nathan, Louis	11	422	Pascoe, Thos.	1	13
Nixon, Bishop	1	20	Portney, David	1	10
Nance, James	1	18	Pursehouse, W.	1	7
Newell, Edwin	1	25	Peet, W.	1	10
Nicholls,-	1	10	Pratt, W.	2	26
Normah, Mrs. (est.)	1	30	Presb. Church (trust.)	1	60
Neil, James	1	10	Propsting, H.	5	86
Nolan, Patrick	1	10	Pulleyn,-	2	32
Nelson, J.	1	16	Punshon, W.	6	166
Norton,-	1	18	Parker, Mrs.	2	23
Noah,-	2	39	Pudney, W.	2	96
Nathan & Moses	1	220	Pedder,-	1	15
Noah, M.	1	5	Pudney, Mrs.	1	16
Oakley, J.	1	10	Page, James	4	60

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Peck, James	2	110	Risby, Thos.(Snr.)	1	20
Priest, W.	1	13	Risby, Thos. (jnr.)	1	50
Priest, Mrs. T.	2	38	Robertson Jas.	1	40
Priest, R.	3	30	Rayner, W.(snr.)	1	10
Panton, D.	1	25	Rayner, W.	2	28
Pearse, P.	2	29	Rowlands, T.W.	1	20
Phipps, Samuel	3	96	Richards,-	10	138
Porter, James	1	20	Rand, Mrs.	1	26
Pearson, L.	1	150	Ramsden, Richards	1	70
Roberts, R.	3	260	Rawlings,-	3	31
Riley, L.	5	102	Robinson, Mrs.	1	9
Read, G.F.	2	47	Roberts, Alex	3	49
Risby Bros.	1	80	Reynolds, Mrs.	3	58
Rheuben, A.	4	143	Russell, R.	1	10
Robinson, W.A.	4	85	Randall, Mrs.	1	15
Ring,-	5	84	Robinson, Thos.	2	66
Rout, William	7	260	Ransom, T.	5	194
Robinson,-	1	10	Richardson, John	1	65
Regan, John	13	291	Registr. Supreme Court	1	40
Reeves, John	4	68			
Roberts,-	1	10	Roberts, W.	3	60
Radcliffe, Mrs.	3	44	Scringer, G.	1	10
Rawlings, C.	16	328	Sly, Mrs.	3	126
Roberts, John	13	488	Swan, John	7	768
Reichenberg, Joseph	1	50	Smith, T. (estate)	1	35
Roope, L.	1	35	Solomon, Judah	34	1986
Rawlings, John	12	162	Stokell, G.	8	265
Reed, James	2	54	Salmon, Mrs.	4	163
Rennie, W.	1	9	Smith, Francis (snr.)	3	305
Riley, W.	3	25	Stewart, J.L.	1	80
Ramsey, D.	1	10	Swanston, Chas.	5	811
Rawlings, E.	1	11	Snowden, Robt.	1	10
Rawlings, J.	2	18	Slosne, J.F.	1	30
Richardson, Thos.	8	275	Skene, Jas.	1	35
Robertson,-	1	32	Stracey, J.C.	3	181
Rice, W.	2	28	Smith, John	4	272
Russell, H.	1	20	Stracey, Mrs.	1	50
Robinson, Edward	1	22	Sprowson, Jas.	3	105
Robertson, John	1	20	Smith, Joseph	3	62
Robertson, Jas.	14	184	Scott, Hopton	1	50
Robertson, W.	10	229	Smith,-	5	59

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Strachan, J.	4	31	Sinclair, Geo.	4	97
Simmons,-	3	43	Smith, Mrs.	1	30
Sanders, J.	3	42	Sproson, J.	4	46
Staples, J.	1	10	Simmonds, H.	1	26
Sprent, Jas.	1	30	Smith, R.C.	2	46
Simmonds,-	1	18	Sherwood, W.	3	48
Symons,-	2	42	Smith, Thos.	7	169
Shadwick,-	2	23	Sheeny, Miss	1	20
Scott,-	3	73	Speak,-	2	260
Shadwick, John	1	30	Sweep, Mrs.	1	18
Smith, Samuel	3	65	Smith, Oliver	1	20
Simpson, P.	2	14	Sherwin, W.	5	105
Salier, G.	4	120	Salter, Wm.	9	247
Shurburd,-	4	64	Sheeny, J.	7	176
Suggett, F.	2	32	Stanley, J.B.	1	100
Stephen, Alfred	1	130	Strutt, Wm.	5	94
Smith, F.C.	1	70	Sherky, H.	1	7
Simpson, D.	10	209	Smith, Robert	1	25
Sherwin, Mrs.	1	80	Stewart, A.	3	72
Stewart, T.J.	1	10	Spiller, Thos.	6	110
Stewart, John	2	54	Sullivan, J.O.	4	64
Sullivan, James	2	90	Tennent, W.M.	1	70
Samson, Geo.	1	13	Tilley, Thomas	2	120
Smith, W.	13	203	Tapping, Caleb.	4	160
Smart, Joseph	4	65	Taylor, Geo.	4	49
Strutt, G.	1	18	Thomson, R.	6	106
Smales, C.R.	2	26	Taylor, John	5	60
Sims,-	3	49	Travers, Thos.	1	15
Smales, Joseph	1	15	Turngate, Geo.	1	8
Strutt, T.	4	48	Tilley, John	26	298
Salmon, Thos.	1	20	Terry, J.J.	1	60
Short, J.	1	7	Tilley, W.	4	65
Stanhouse, David	1	20	Turner, W.	8	219
Sharman, W.	12	350	Trump, John	9	232
Sawyer, John	1	10	Turnbull, J.S.	4	255
Smallhorn, S.	1	15	Taylor,-	3	40
Smith, W.C.	1	32	Travis, Capt.	1	13
Serjeant, Mrs.	2	60	Taylor, W.	2	27
Smith, J.	2	61	Tynan, T.	2	65
Sinclair, P. & W.	1	35	Tibbs,-	1	10
Sinclair, W.	1	23	Taylor, Joseph	1	15
Shurburd, W.	1	12			

Name	Properties		Name	Properties	
	No.	Ann. Value		No.	Ann. Value
Turner, John	1	25	Wetton, T.	1	30
Tynan, P.	2	20	Wilson, W.(estate)	1	120
Turner, H.	1	5	Warne, W.	3	39
Tegg, Mrs.	1	200	Wilson, Miss	1	40
Thomson, Mrs.	4	295	Woodin,-	1	45
Tee-Total Society (trustees)	1	30	Whiting, J.	1	12
Thomas, John	7	128	Wainwright, Thos.	5	51
Tegg, Mrs.(trustees)	1	250	Woodward,-	1	16
Thomson, J.A.	1	180	Wilson, Robt.	4	283
Turnley,-(estate)	7	233	Waterhouse Bros.	2	260
Tubby, Mrs.	1	60	Wilson, J.	1	24
Taylor, D.	1	200	Wear, W.	4	68
Thompson, H.	1	20	Wilson,& Tonkin	7	689
Tas. Ins. Comp.	1	50	Williams, Jas.	12	161
Ulmer, John	1	80	Watchorn, Lucy	4	108
UNIDENTIFIED OWNERS			Warne,-	3	113
a	1	150	Webb, J.	6	215
b	1	52	Williams, W.	17	346
c	1	25	Watson, G.	1	50
d	1	15	Walker, John	9	756
e	1	25	Wilson,- (estate)	5	530
			Woolley, Wm.	6	390
Vaughan,-	2	33	Walker, R.	1	80
V.D.L. Ins. Co.	1	50	Webb, William	1	45
Willmore, Joseph	1	10	White, W.	3	55
Wishart, Mrs.	2	35	White, H.	1	150
Watson, Alex.	4	90	Wilson, James	4	155
Waterhouse, R.S.	2	125	Wright, John	12	251
Withers, P.	1	20	Warn, Woolnaugh	1	16
Ware, Thos.	2	52	Watson, John	1	100
Wise, W.	2	55	Wray, Captain	1	30
Webb, H.	18	186	Wright, Alex.	18	179
Wilson, G.	5	325	Wherrett, J.T.	5	95
Walker, W.	15	200	Walton, Thos.	7	95
Williamson, John	1	10	Williamson, S.	2	120
Winterbottom, Mrs.	4	37	Wilkinson, E.	3	89
Wright,-	1	6	Williams, C.	1	70
Walker, W.	15	200	Ware, Jeremiah	2	35
Watson, W.	1	20	Weaver, John	3	36
Wilkinson, John	6	320	Wiggins, James	1	52
Watkins,-	2	28	Waterhouse, J.T.	2	118
Watts,-	3	29	Willson, Thos.	1	5
Warne, Geo.	1	13	Wesleyan Trust	3	140

Name	Properties	
	No.	Ann. Value
Wood, D.W.	1	7
Waterhouse, Mrs.	1	25
Wherrett, Thos.	1	16
Wilkinson, H.	1	26
Warne, Jacob	1	12
Wheeldon, Jas.	1	12
Watchorn, W.	1	250
Watchorn, Harriet	1	100
Walford, Mrs.	3	140
Wilson,C.	1	100
Williams,-	1	25
Wilks, H.	12	293
Wilson, W.	1	50
Wallace, L.	3	49
Wayman, John	1	18
Wilkinson, P.	1	20
Walford,-	1	90
Young, W.	5	326
Young,- Jnr.	3	201
Young, Joseph	2	58
Yates,-	1	12
Young, Thos.	1	100
Yates, Thos.	1	11
Total	2940	£102,110

Average No. of properties held 3.17

Average annual value £110.03

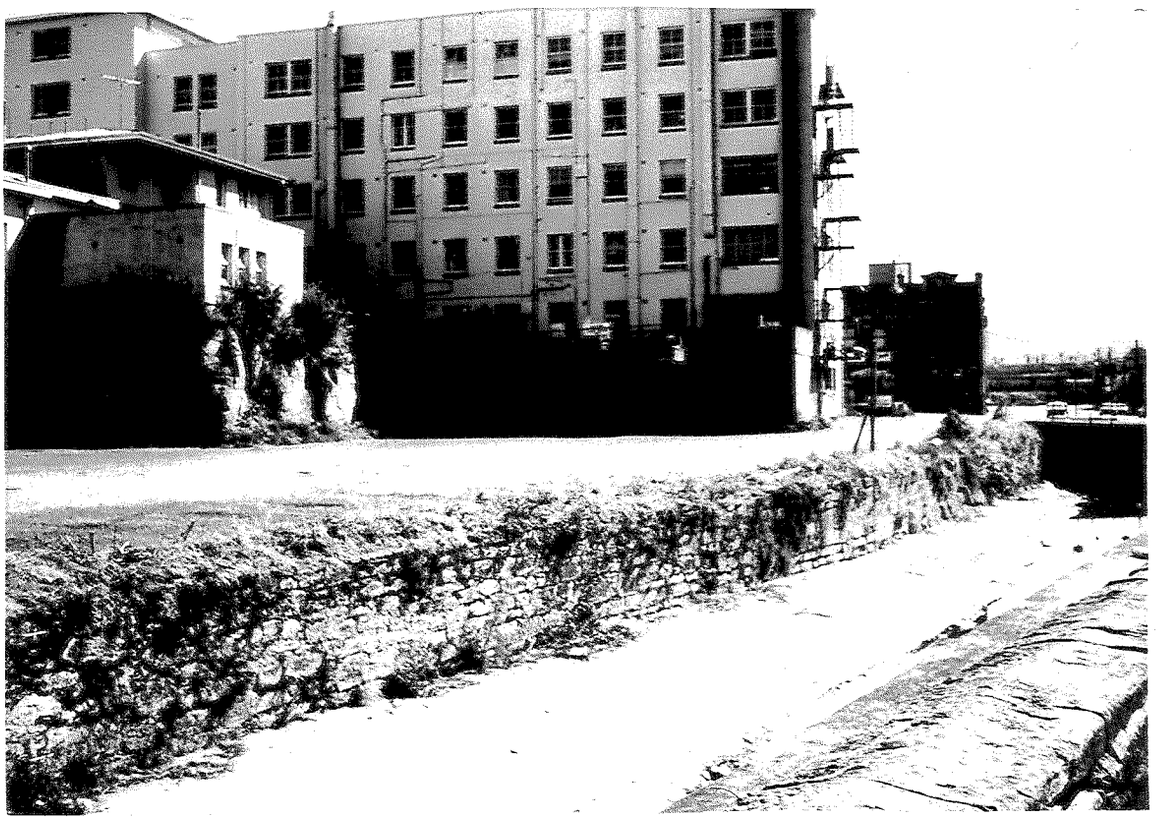
APPENDIX XIII

VDL Imports & Exports (£s) 1847

Articles imported	V.D.L.	Brit.Col.	Foreign	Total
Apparel	44,858	3,530	-	48,388
Apothecary	2,962	117	-	3,079
Arms and ammunition	1,558	84	20	1,662
Beef and pork	2,133	6,413	72	8,618
Boots and shoes	8,072	68	54	8,194
Brandy	14,792	3,949	-	18,746
Butter and cheese	1,294	2,640	167	4,101
Candles and tallow	635	491	130	1,256
Canvas and bagging	17,582	6,360	10	23,952
Carriages and carts	450	75	-	525
Casks	620	--	-	620
Cattle	-	15,929	-	15,929
Cedar	-	1,676	-	1,676
Coals	174	826	-	1,000
Coffee	389	2,260	1,237	3,886
Copper, lead	8,305	210	-	8,515
Cottons, linens	34,928	715	36	35,679
Currants, raisins	1,804	593	-	2,397
Deals, oats, staves	600	20	-	620
Flour and grain	59	2,546	-	2,605
Geneva	4,765	483	-	5,248
Glass, earthenware	19,405	790	10	20,205
Haberdashery	33,199	403	547	34,147
Hats, and caps	7,004	532	127	7,663
Hardware	39,846	965	219	41,030
Hides, skins, leather	150	2,365	-	2,515
Hops	5,799	614	732	7,145
Horses	1,000	-	-	1,000
Iron	6,092	789	-	6,881
Jewellery, plate	6,755	-	-	6,775
Liqueurs	29	-	-	29
Malt liquor	21,668	1,191	-	22,859
Millinery	9,966	-	-	9,966
Musical instruments	2,016	3	-	2,019
Oilman's stores	22,169	4,938	526	27,633
Oil, black	-	885	382	1,267
Oil, sperm	-	-	5,950	5,950
Paint, oil, tar, turpentine	3,802	40	158	4,000
Perfumery,	1,559	-	-	1,559
Rope	8,956	1,778	822	11,558
Rice	26	524	151	701
Rum	15,553	7,904	100	23,557
Saddlery	3,841	62	-	3,903
Salt	1,900	176	-	2,076
Sheep	40	11,713	-	11,573
Silks	10,661	333	-	10,994
Soap	2,021	3,134	-	5,155
Stationery, books	13,752	2,453	-	16,205
Sugar	10,190	27,981	13,444	51,615
Tea	272	11,604	12,083	23,959
Timber	268	2,328	-	2,596
Tobacco	4,935	7,004	5,556	17,495
Whisky	86	190	-	276
Wines	12,449	4,072	60	16,581
Woollens	102,400	5,775	-	108,175
Wool	-	4,794	-	4,794
Unenumerated	3,992	7,951	898	12,841
Whalebone	-	100	940	1,040
Total	517,786	162,376	44,431	724,593

Articles exported	V.D.L.	Brit. Col.	Foreign	Total
Apothecary	-	279	-	279
Apparel	5	6,623	-	6,628
Arms, ammunition	-	73	-	73
Bags and canvas	4	2,086	-	2,090
Bark	935	278	-	1,213
Barley	-	4,270	-	4,270
Brandy	-	8,019	-	8,019
Beef and pork	-	717	268	985
Books, stationery	10	697	-	707
Boots and shoes	60	1,681	-	1,741
Butter and cheese	-	1,066	17	1,083
Bran	-	484	126	610
Carriages and carts	-	1,883	-	1,883
Coffee	-	204	-	204
Cottons, linens	-	12,709	35	12,704
Curiosities	184	-	-	184
Earthenware, glass	-	1,070	10	1,080
Flour	1,211	38,124	1,260	40,575
Furniture	-	2,865	-	2,865
Fruit, preserves	-	5,576	81	5,657
Geneva	-	800	-	800
Haberdashery	15	4,780	-	4,795
Hay	-	465	-	465
Hides, skins, leather	2,766	5,584	195	8,545
Hops	-	1,497	15	1,512
Horses	-	7,511	-	7,511
Ironmongery	220	9,404	67	9,691
Iron, lead	183	584	-	767
Malt	-	516	-	516
Malt liquor	-	3,478	12	3,490
Oats	-	5,592	56	5,648
Oil, black	21,150	478	-	21,628
Oil, sperm	41,467	70	-	41,537
Oilman's stores	-	5,149	10	5,159
Potatoes	16	3,891	148	4,055
Rope and twine	-	441	-	441
Rum	-	7,083	-	7,083
Salt	-	259	-	259
Sheep	-	1,808	-	1,808
Soap	-	356	-	356
Staves	-	146	-	146
Sugar	-	4,343	-	4,343
Tea	-	1,603	5	1,608
Tallow and candles	3,042	478	31	3,551
Timber	226	15,170	18	15,414
Tobacco	-	7,460	-	7,460
Whalebone	4,135	-	-	4,135
Wheat	14,824	68,419	2, 440	15,683
Wine	-	1,760	-	1,760
Wool	247,240	-	-	247,240
Woollens	-	1,439	330	9,103
Unenumerated	916	7,857		
Total	338,609	257,125	5,142	600,876

APPENDIX XIV



Sandstone bluff at the rear of the Royal Hobart Hospital, 1967. This low cliff formed the first noticeable landward break in the low-lying topography of the eastern corner of the town. Formerly the site of Capt. Kelly's house (Appendix XXXI).

APPENDIX XV

Return of the Purchases and Exchanges that have been made by Government of Buildings and Lands in Van Diemen's Land

Date	Name	House etc.	Street or situation	Amount
1810	Capt. Madden	House & 100 acres	near the Barracks	800
	Purchased by Collins for an Orphan School; afterwards suffered to go to ruins. The materials were sold to Presnell by Lt. Gov. Davey.			
1813	Thomas Staples	House	Liverpool	15 +
	Arthur Connelly	"	Argyle	12 +
	Hannah Garrett	Skilling	Liverpool	7 +
	Danl. Ankiss	House	Collins	11-4-3+
	Richard Hazard	"	Elizabeth	15+
	J. Grierson	Skilling	Barrack	7-3-0+
	Fran^{s} Barnes	House	Georges Sq.	12+
	James Clego	Hutt	"	4+
	John Symmonds	"	"	2-10-0+
	Chas. Connelly	House	Elizabeth	20+
	Thos. Heath	"	"	15+
	Sarah Manning	"	"	10+
1816	Wm. Presnell	"	Collins	24-15-0+
1817	Wm. Crowden) John Herbert)	" Herbert's part removed " to a new plot; and Crowden has a house built by Govt.		This house stood across Eliz. St.
1818	James Morrison	Skilling	Collins	10*+
	Anty Chandler	House	"	20*+
	Wm. Pritchard	Skilling	Murray	5*+
	Wm. Wright	Hutt	Liverpool	10*+
	J. Knowland	"	Collins	10*+
1819	Oliver Smith	House	"	20*+
	John Manby	"	"	15*+

* All these were valued in 1813 but the Houses were not paid for and removed till 1818

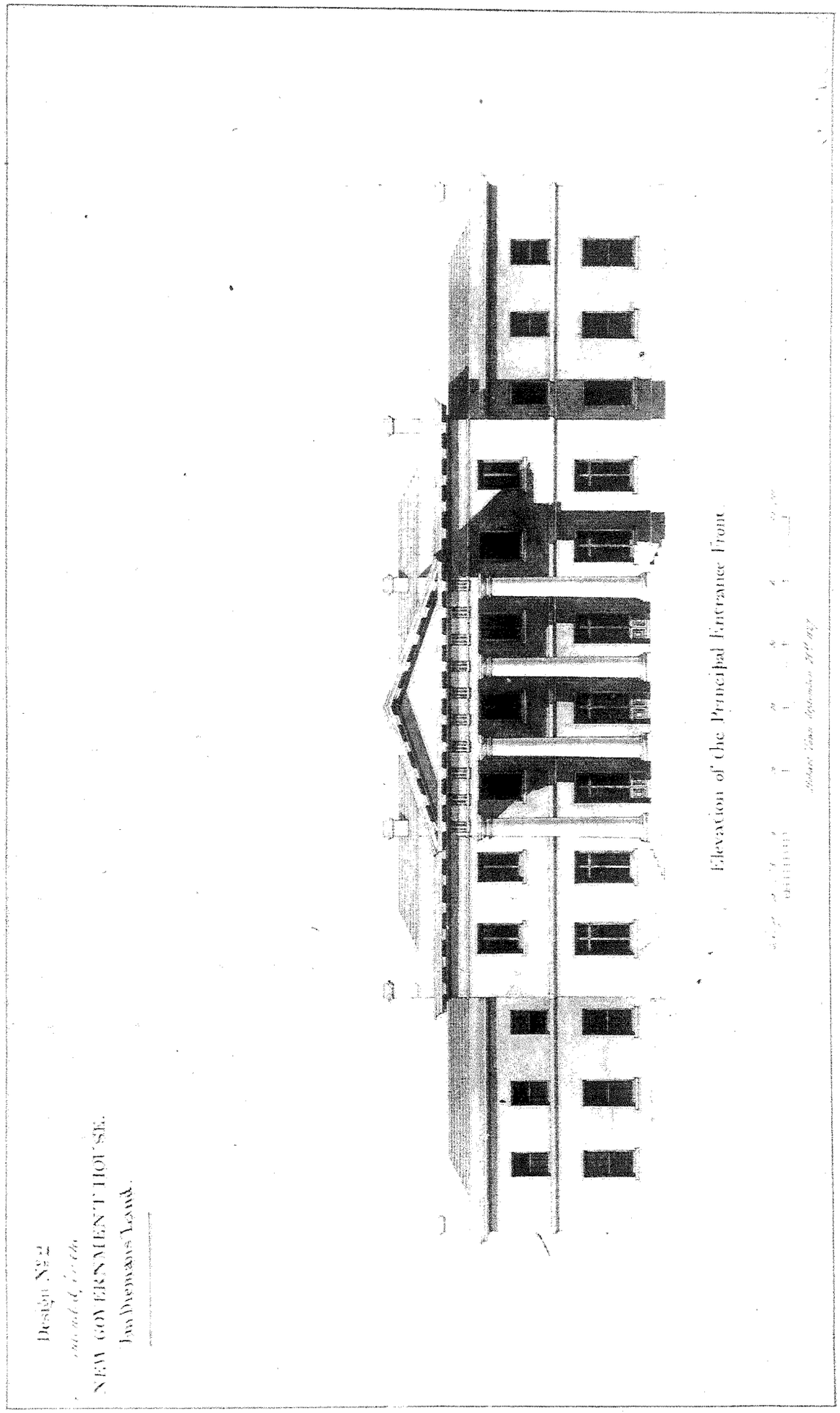
\+ These were valued and paid for requiring removal for the arrangement of the Streets on the present plan of H.T., the whole of the persons are provided with other Bldg. Plots

1817	Andrew Whitehead	House, outhouses & 105 acres of land New Town		1000
	This premises being required to complete the track fenced in by Govt. fr. H.T. to New T. Rivulet in addition to the sum of £1000 600 acres of land has been given Mr. W. making the total amount £1300 as per valuation.			
1818	George Guest	One house two hutts	Campbell	200
	In part for the loss of those bldgs. chiefly destroyed by the military who occupd. same as barracks [also stood on way of new streets]			

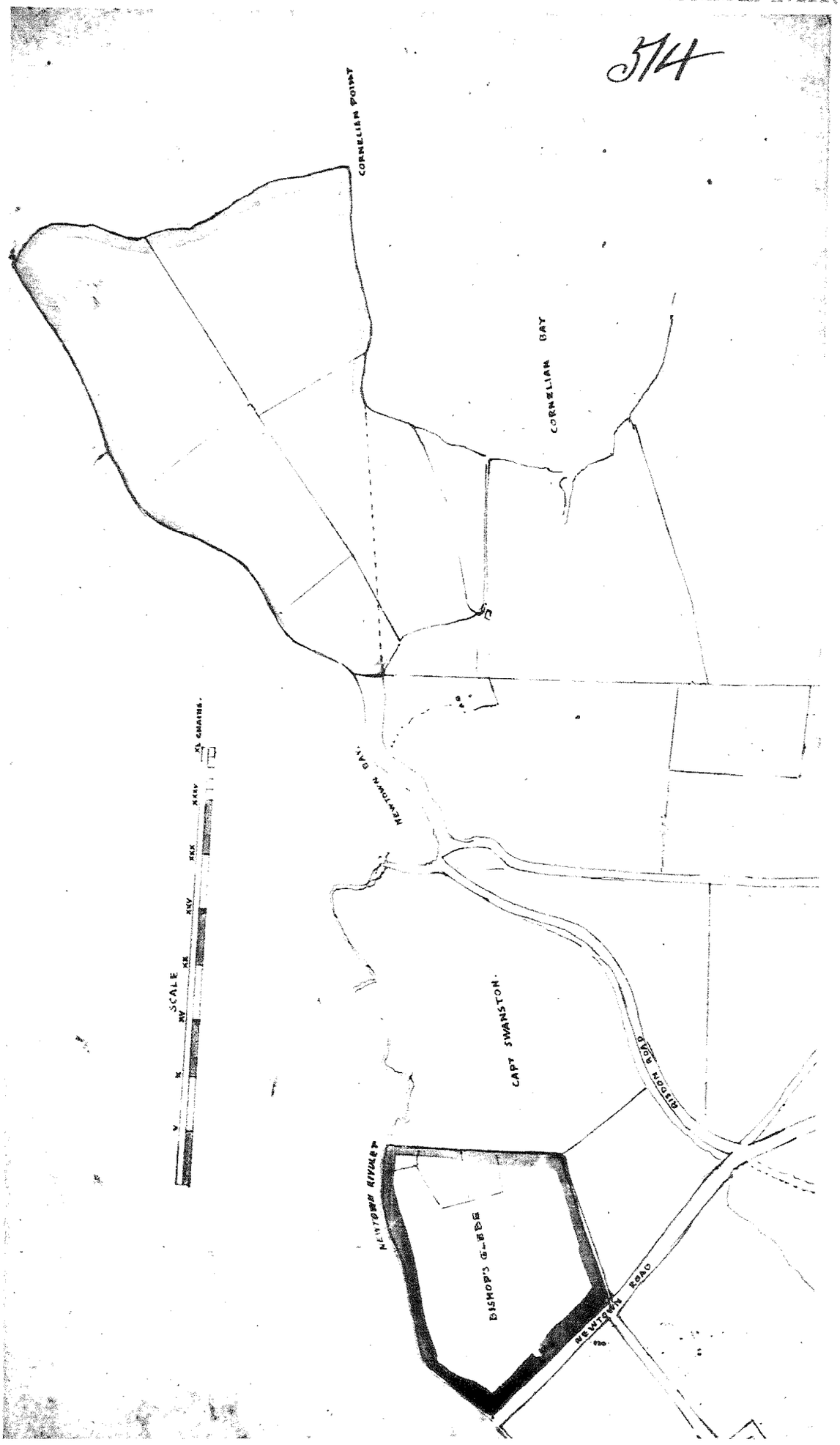
Date	Name	House etc.	Street or situation	Amount
1818	Mr. Archer	100 acres	Pitt Water	-
	Andrew McGill	House	Macquarie	40
	[Purchased to give room for two two-storey bldgs.]			
1819	James Lord	House	Davey	50
	Surrendered to Govt. with his lease of 2 acres near the Barracks			
	John Gwynn	Skilling	Near the water	30
	Purchased in order to keep the Govt. land nr the creek clear [originally £24 + 600 bricks]			
	Agents to the House of Alexander & Co.	2 acres in H.T. which the bisection of the streets divide	-	
	[Plot encl. by Campbell L'pool & Bathurst in lieu]			
	Ann Saltmarsh	House	near the church	94
	Wm. Handcock	"	"	40
	Mary Ann Peck	"	"	35
	Required to give room round the Church or for a Parsonage House to be built			

Source: CSO 1/112/2779 pp. 92, 93 State Archives.

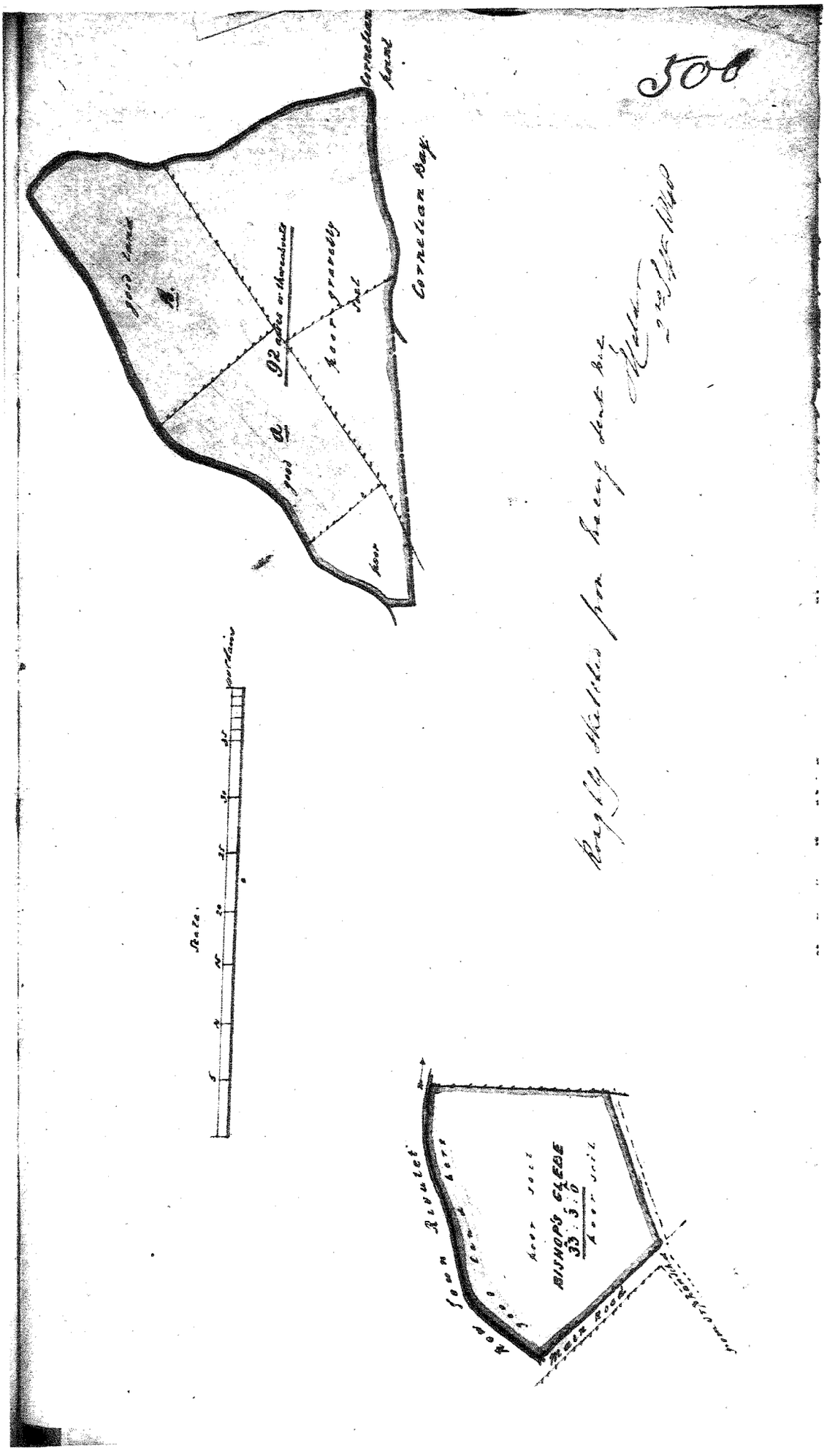
APPENDIX XVI



Plan for new Government House, by John Lee Archer, 1827 (MPD 116/4, Public Record Office).



Development of New Town land, 1841 (ISD 1/14/514, State Archives).



Assessment of Bishop's Glebe and Cornelian Point, 1841 (ISD 1/14/500, State Archives).

APPENDIX XIX

Census returns for the district of New Town 1837(Access 3294)

	Over 14		Under 14			Convicts		
	M	F	M	F	T	M	F	T
Branscomb	1	1	-	-	2	5	-	5
Boucher	3	1	4	2	10	-	-	-
Bleakley	2	-	-	-	2	-	1	1
Beament	3	3	-	-	6	3	-	3
Briggs	2	4	-	-	6	10	-	10
Brathwaite	1	1	1	-	3	1	-	1
Bell	1	4	1	2	8	5	1	6
	[2	-	-	-	2	10	-	10]*
Blackwell	3	1	-	4	8	-	-	-
Blackall	2	-	1	1	4	1	-	1
Bennett	1	1	-	-	2	-	-	-
Brown	2	3	-	1	6	1	-	1
Beresford	2	-	-	-	2	-	-	-
Cassions	1	1	2	1	5	-	-	-
Clark	1	1	2	-	4	-	-	-
Carroll	1	1	1	1	4	-	-	-
Cato	3	2	2	4	11	-	-	-
Carr	1	1	-	-	2	2	1	3
Cowen	4	1	1	-	6	-	-	-
Crowther	1	1	-	-	2	3	-	3
Collman	3	-	-	-	3	1	-	1
Cain	3	1	1	-	5	-	1	1
Clark	1	1	1	-	3	1	-	1
Clarke	1	2	3	-	6	3	1	4
Calder	1	-	-	-	1	1	-	1
Currey	1	1	3	-	5	1	-	1
Curtis	1	1	1	-	3	-	-	-
?	1	2	2	2	7	1	-	1
Devington	1	-	-	-	1	1	-	1
Davis	3	1	1	1	6	-	-	-
David	1	1	-	-	2	-	-	-
Davley	1	1	-	1	3	-	-	-
Anderson	1	2	1	4	8	3	-	3
Allen	2	2	-	3	7	4	-	4
Austin	3	3	-	-	6	-	1	1**
Allard	1	1	1	2	5	-	-	-
Ayton	1	1	-	-	2	-	-	-

* these people seemed to be staying with Bell at time of Census

** 4 have initials only

	Over 14		Under 14			Convicts		
	M	F	M	F	T	M	F	T
Abbott	1	2	2	2	7	1	1	2
Archer	2	1	-	2	5	2	2	4
Burgess	4	1	-	-	5	-	-	-
Bradfield	1	-	-	-	1	-	1	1
Brewer	2	1	2	2	7	5	4	9
Brown	1	3	1	3	8	-	-	-
Brown	1	1	-	1	3	-	-	-
Beale	-	1	-	-	1	1	-	1
Bush	1	1	2	2	6	1	-	1
Brown	3	-	-	-	3	-	-	-
Bertram	1	-	-	-	1	3	-	3
Bilton	2	4	3	2	11	2	3	5
Billton	2	1	-	-	3	4	1	5
Bowden	2	2	5	3	12	1	-	1
Bannister	1	-	1	1	3	-	-	-
Baker	1	1	-	2	4	1	-	1
Barckley	1	3	2	2	8	2	-	2
Bowden	4	1	1	1	7	5	1	6
Beadley	4	1	-	-	5	-	1	1
Brown	2	1	-	-	3	-	-	-
Bird	1	-	-	-	1	6	-	6
Connor	2	2	1	1	6	1	-	1
Dixon	1	-	-	-	1	30	0	30*
Fuller	1	1	-	-	2	-	-	-
Fox	2	-	-	-	2	2	-	2**
Francis	1	1	1	1	4	-	-	-
Finch	1	1	-	-	2	1	-	1
Farange	2	1	-	1	4	-	1	1
Fletcher	1	1	2	1	5	6	2	8***
Flower	3	1	-	-	4	1	-	1
Frake	2	1	-	-	3	1	-	1
Furlong	1	-	-	-	1	-	1	1
Fox	4	1	3	2	10	1	-	1
Gardner	2	1	-	-	3	-	-	-
Giblin	1	3	3	2	9	4	-	4
Gatehouse	9	4	-	-	13	7	-	7
Giblin	5	2	2	-	9	7	2	9
Gazard	1	7	-	-	8	-	-	-****
Godwin	1	1	1	2	5	-	-	-
Gill	2	1	2	3	8	-	-	-
Garbett	1	1	2	1	5	-	-	-

*Glenorchy Road Party
** 2 convicts are also listed under "free" persons)
*** children's initials only
**** Claims to have 43 children

	Over 14		Under 14			Convicts		
	M	F	M	F	T	M	F	T
Gettabran	2	3	3	2	10	3	3	6
Hurst	2	2	1	3	8	-	-	-
Howes	1	1	1	2	5	1	-	1
Hipworth	1	-	-	-	1	-	1	1
Howroth	1	1	1	3	6	-	-	-
Howll	2	-	2	1	5	-	-	-
Hyatt	3	1	-	-	4	-	-	-
Herring	1	1	2	3	7	-	-	-
Hancock	3	4	-	-	7	1	-	1
Hyems	-	1	1	2	4	1	-	1
Hallam	1	-	2	-	3	2	-	2
Howther	3	1	1	-	5	-	-	-
Hull	6	2	4	2	14	7	4	11*
Embey	3	2	1	-	6	5	-	5
Ichcok	1	-	-	-	1	-	-	-
Jones	1	1	-	1	3	1	-	1
Jordan	1	1	-	1	3	-	-	-
Jones	-	1	-	-	1	-	-	-
Johnson	-	1	-	-	1	1	-	1
Knibbs	3	1	2	2	8	1	-	1
Lankshear	2	-	-	-	2	-	-	-
?	1	2	-	-	3	3	1	4
Leviston	2	1	3	-	6	1	-	1
Looker	2	1	-	-	3	1	1	2
Lownds	1	1	1	1	4	-	-	-
Little	1	1	1	3	6	1	-	1
Larance	1	-	-	-	1	1	-	1
Lee	1	1	1	4	7	-	1	1
Lowns	2	1	2	-	5	-	-	-
Lowes	6	2	-	1	9	2	-	2
Mackie	-	1	-	-	1	1	-	1
McGuire	2	1	-	-	3	-	-	-
McGuire	1	2	-	-	3	-	-	-
McGuire	1	1	-	1	3	1	-	1
McShaen	2	-	-	-	2	2	-	2
McDonabet	-	2	4	1	7	-	-	-
McLachlan	3	4	1	4	12	2	-	2
McTavish	-	3	-	-	3	2	-	2
Marshall	1	-	-	-	1	1	-	1**
Mansfield	4	2	4	2	12	2	-	2
Murdoch	3	2	2	3	10	2	-	2

* 2 children initials only

** Initial only

	Over 14		Under 14			Convicts		
	M	F	M	F	T	M	F	T
Moore	7	1	-	1	9	9	-	9
Moore	1	1	1	-	3	1	1	2
Madden	2	1	-	-	3	1	1	2
Mooney	1	-	-	-	1	1	-	1
Mansfield	1	1	1	-	3	-	-	-
Grant	2	1	-	-	3	4	-	4
Mowat	2	1	-	1	4	-	-	-
Noyes	3	-	1	-	4	3	-	3
Naylor	1	1	-	1	3	-	-	-
Naylor	3	5	5	-	13	4	-	4
Nichols	1	1	4	4	10	-	1	1
Newman	3	1	-	-	4	1	-	1
Newman	1	-	-	-	1	100	-	100
Nichols	1	1	1	2	5	2	-	2
Nash	1	2	-	-	3	1	-	1
Outridge	1	1	1	-	3	1	-	1
Overall	1	-	-	-	1	1	-	1
Overall	2	1	1	1	5	-	-	-
Oakley	4	1	2	4	11	-	-	-
O'Brian	2	1	-	1	4	-	-	-
Pitcairn	4	3	1	1	9	2	-	2
Purden	2	1	2	1	6	-	-	-
Pearce	1	2	-	-	3	-	-	-
Purdy	1	-	2	-	3	1	1	2*
Poultney	1	1	-	1	3	-	-	-
Peardon	1	1	1	-	3	2	-	2
Penroy	1	-	-	-	1	-	-	-
Perton	1	1	1	2	5	-	-	-
Penenton	1	-	-	-	1	1	-	1
Pittman	1	-	-	-	1	-	-	-
Pearson	1	1	1	-	3	-	-	-
Reason	3	1	1	2	7	4	-	4
Regan	1	-	-	-	1	7	-	7
Rathbone	-	2	1	1	4	1	-	1
Read	3	2	-	-	5	2	2	4**
Rosendale	1	1	2	1	5	-	-	-
Roberts	2	1	2	1	6	-	-	-
Robertson	1	1	1	-	3	-	-	-
Rodman	1	1	3	-	5	-	-	-
Richards	1	-	-	-	1	-	1	1

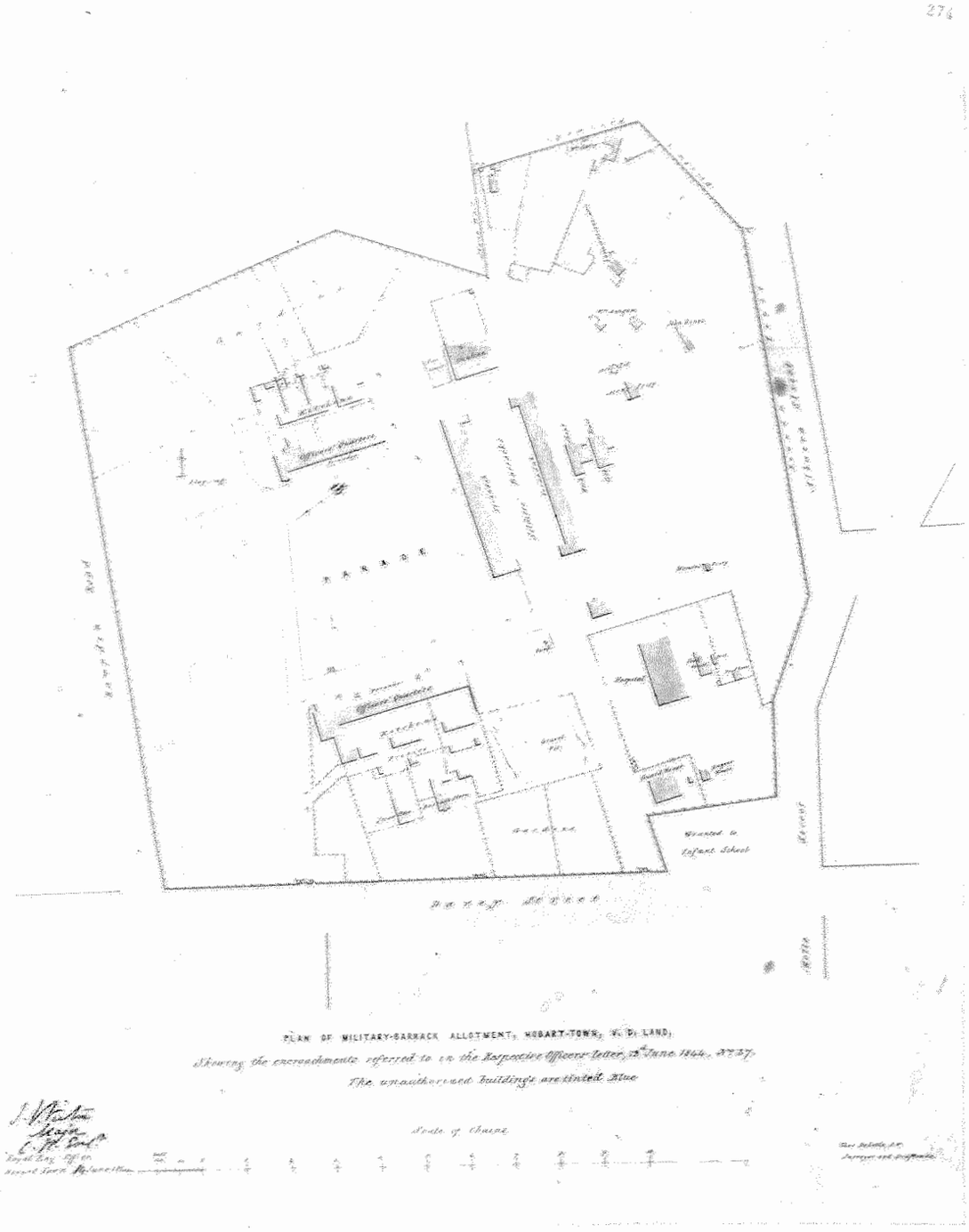
* Female convict was wife

** 2 initial

	Over 14		Under 14			Convicts		
	M	F	M	F	T	M	F	T
Ray	-	1	-	1	2	-	-	-
Robins	2	1	2	1	6	1	-	1
Spode	1	4	3	1	9	4	2	6
Seabrook	1	1	1	2	5	2	-	2
Summers	1	1	1	1	4	-	-	-
Slater	-	1	1	-	2	-	-	-
Sadler	3	5	3	3	14	1	-	1
Swifte	1	1	1	-	3	2	1	3
Sadgrove	1	1	-	2	4	-	-	-
Smith	2	1	-	-	3	1	-	1
Sheppard	2	-	-	-	2	-	-	-
Stringer	1	2	-	-	3	-	-	-
Stevens	1	1	2	-	4	-	-	-
Simpson	1	1	-	1	3	1	-	1
Shernall	3	1	-	-	4	-	-	-
Swanston	4	6	3	6	19	5	-	5
Scott	1	3	2	3	9	1	-	1
Savage	1	-	-	-	1	1	-	1
Taylor	1	-	-	-	1	1	1	2
Tague	1	-	-	-	1	-	-	-
Turner	2	1	1	1	5	-	-	-
Upstone	1	-	-	-	1	-	-	-
Ward	1	1	1	1	4	-	-	-
Wilson	3	2	-	1	6	2	1	3
Walford	1	1	1	1	4	-	-	-
Williamson	1	-	-	-	1	1	-	1*
Walsh	1	1	1	1	4	6	-	6
Williams	3	1	-	-	4	-	-	-
White	1	1	4	1	7	-	-	-
Webb	2	1	3	3	9	-	-	-
Watson	2	1	2	1	6	-	-	-
Wilson	2	2	1	-	5	1	1	2
Williams	1	-	1	-	2	-	-	-
Wrathall	1	2	3	-	6	-	-	-
Wright	1	1	-	-	2	-	-	-
Young	3	-	-	-	3	-	-	-
Young	1	-	-	-	1	1	1	2

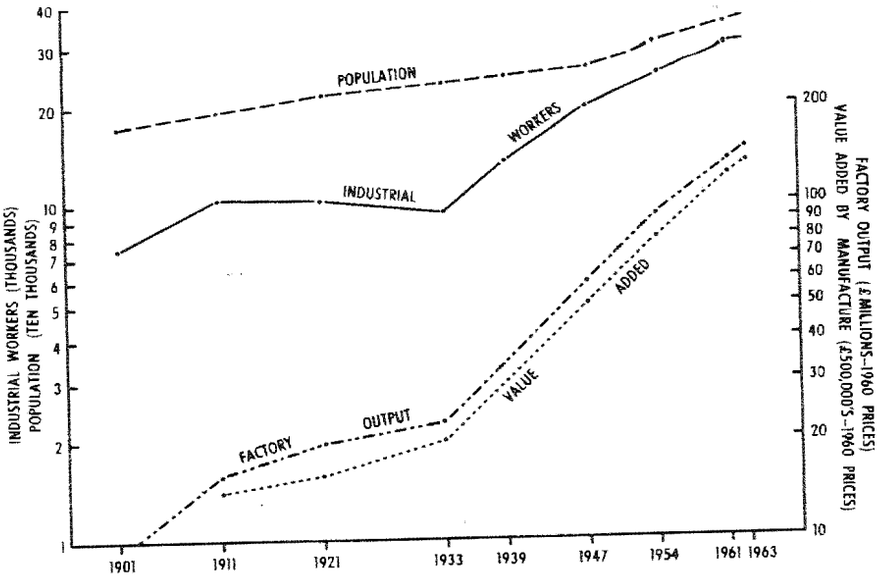
* Initial only - most likely male

APPENDIX XX



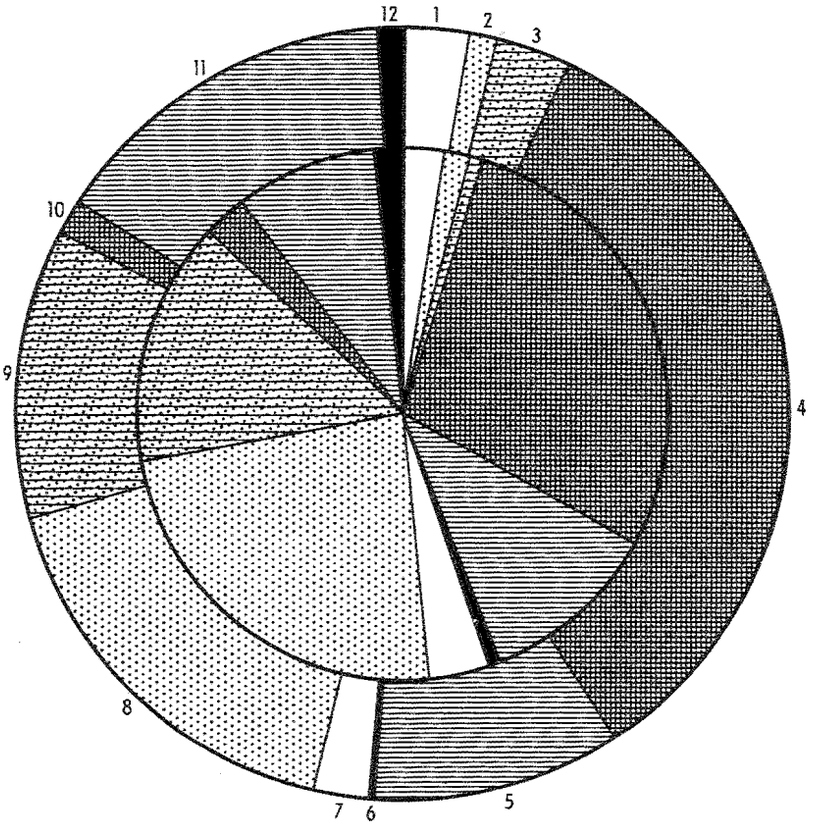
Plan of Military Barracks, Davey Street, 1844 (MPH 85/1, Public Record Office).

APPENDIX XXI



Growth of Tasmanian manufacturing employment and production, compared with population, 1901-1963 (Commonwealth Census, Summary of Australian Statistics).

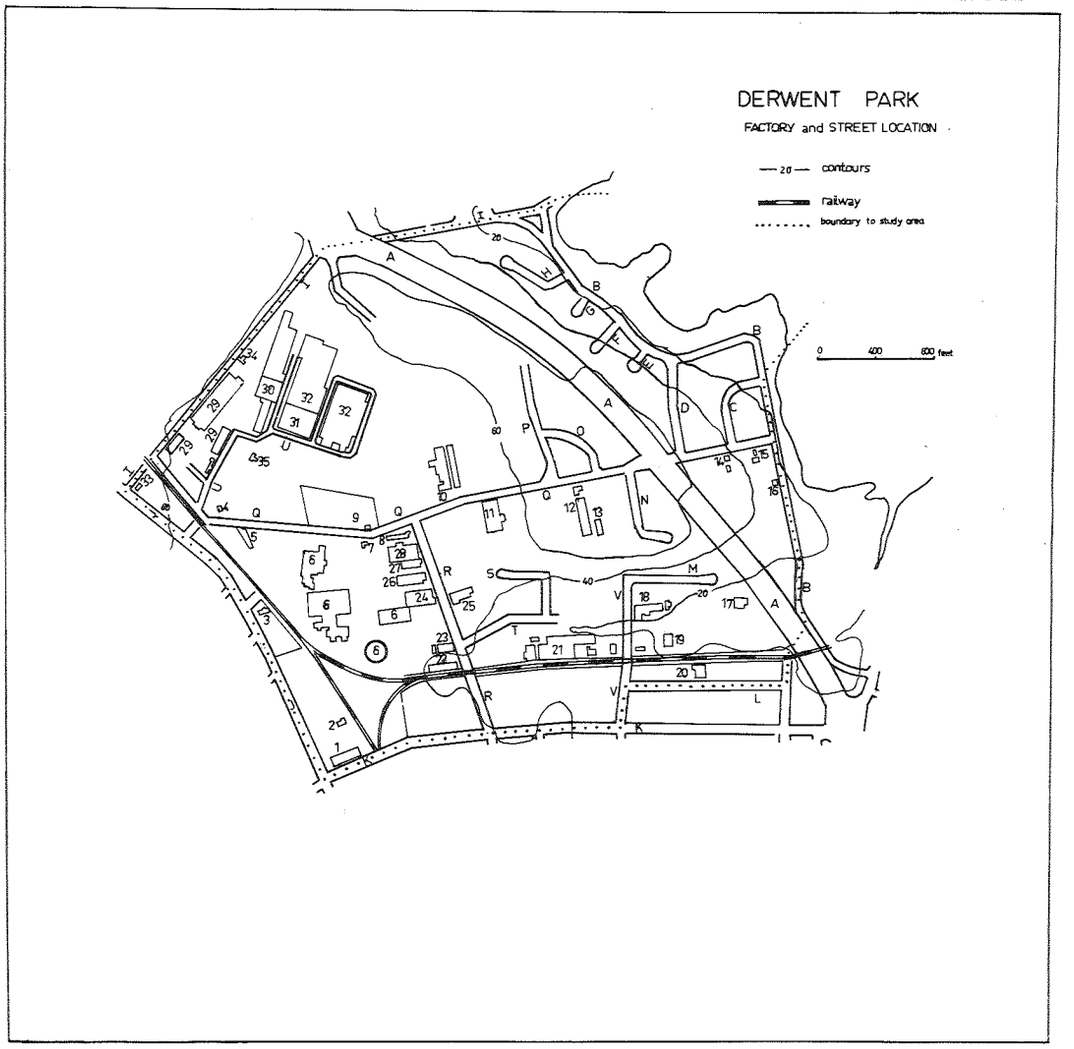
APPENDIX XXII



Structure of Tasmanian industrial employment 1938/39 (inner circle) and 1962/63 (outer circle). Radii are proportional to total employment in industry.

1. Non-Metalliferous Mine products
2. Bricks, pottery, glass
3. Chemicals, dyes
4. Metals, machines, engineering
5. Textiles
6. Skins, leather
7. Clothing, footwear
8. Food, drink
9. Sawmills, joinery
10. Furniture, bedding
11. Paper, printing
12. Miscellaneous products

APPENDIX XXIII



Derwent Park manufacturing firms, composition and location 1966.

Key to firms (names next page):

Engineering - 4, 10, 14, 16, 17, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35.

Timber - 3, 5, 9, 19

Cement - 2, 6, 18

Glass - 21

Textiles - 32

Food - 1, 8

Distribution - 7, 11, 12, 13, 15

A = Brooker Highway

J = Main Road

R = Sunderland Street

Other letters = Suburban streets

Appendix XXIII Key to Figure

Engineering

4. Haward Metal Fabricating P/L.
10. Johns & Waygood Ltd.
14. Acrow P/L.
16. Derwent Foundry
17. I.S.A.S. (Tas.) P/L.
20. N.G. Sherrin P/L
22. Stewarts & Lloyds (Fab.) P/L.
23. Wormald Bros. (Tas.) P/L.
24. Russell Allport & Co. P/L.
25. Purdon Engineers P/L
26. Montpelier Foundry P/L
27. Rowe Engineering P/L.
28. H.E.C. Salvage Store
29. Murex (A'sia) P/L
30. Cunningham & Arrowsmith P/L.
31. Stramit Industries Ltd.
33. Entrez Wrought Iron
34. Glenorchy Bodyworks
35. Commonwealth Electronics P/L.

Timber

3. Kemp & Denning P/L.
5. A.V. Jennings Industries (Aust.) Ltd.
9. I.X.L. Timber P/L.
19. B.G. Clennett P/L.

Cement

2. Wunda Cement Works
6. Humes Ltd.
18. The Readymix Group (Tas.)

Glass

21. Australian Glass Mfrs. Co.

Textiles

32. Silk & Textile Printers P/L.

Food

1. Sanitarium Health Food Co.
8. Daffodil Food Products P/L.

Distribution & Services

7. Van Sales
11. F.H. Stephens (Hobart) P/L.
12. Stewarts & Lloyds (Dist.) P/L.
13. William Holyman & Sons P/L.
15. Continental Laundry

APPENDIX XXIV

Murray Street in 1880, with horse-cab rank between Davey and Macquarie Streets, and in 1870 between Macquarie and Collins Streets (Tasmanian Museum collection).

Appendix XXV

The State of Sewerage in 1886

Based on: Drainage and sewerage of the city of Hobart: report to city board of health by A. Mault, Engineering inspector to the board, Journals and Printed Papers of Parliament, 1886, Report No. 47

The inspector reported that the city area contained less than 4,500 houses on 1,270 acres. Water supply was at the rate of 65 gallons per inhabitant per day, with an average of 330 gallons per house.

Sewerage lines were to be extended to Yardley St. in the north, past Anglesea St. in the west, Sandy Bay Rivulet in the south, and Park St. in the east (excepting Glebe Town). However, "no proper plan of the existing sewers is in the possession of the Corporation, so that I am not in a position to say how much of the city is already drained, and whether it be so efficiently or not." It appeared that some considerable portion of the existing sewers had been constructed to carry the waters of small rivulets and were larger than needed for a general system of house sewerage.

The inspector calculated that there were probably less than 400 W.C.s in the city, but did not know what proportions were connected to the sewers and cesspools, respectively. Houses having privies with moveable pans numbered 600, leaving "about 3500 houses that have ordinary privies". Cesspits rather than ashpits (common in England) were usual and most of the material was absorbed in the surrounding earth.

Some public gutters were "open sewers for several hundred yards in length, receiving foul water from every house they pass, and consequently becoming more and more offensive as they go". Corporation scavengers were employed to sweep and cleanse about one mile and a half of the 37 miles of streets, per day, with about two and a half miles of gutter, most of which were ill-paved. The cost of implementing a new sewerage system was estimated at £60,000. Meanwhile, the collected sewage was carted to the New Town and Sandy Bay farms.

APPENDIX XXVI

Collins Street and lower Collins Street, c.1901.
(Tasmanian Museum collection)

The Alexandra end of Hunter Street in 1905, and (at the Tivoli Alley in 1897 (Tasmanian Museum collection).

...Memphis Streets in 1864 and 1910 (Memphis Public Library).

APPENDIX XXIX

Commercial Proportion of Block Total Valuations

1847 - 1954

Block	1847	1901	Change '47-'01	1954	Change '01-'54	Change '47-'54
1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	1.8	1.8	1.8
3	0.0	1.1	1.1	0.0	-1.1	0.0
4	0.0	0.0	0.0	0.4	0.4	0.4
5	0.0	1.0	1.0	4.8	3.8	4.8
6	0.0	0.0	0.0	2.3	2.3	2.3
7	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	3.6	3.6	3.6
9	11.8	0.0	-11.8	3.9	3.9	-7.9
10	34.2	0.0	-34.2	1.8	1.8	-32.4
11	0.0	7.7	7.7	0.0	-7.7	0.0
12	20.0	0.8	-19.2	4.5	3.7	-15.5
13	0.0	2.5	2.5	0.0	-2.5	0.0
14	0.0	0.0	0.0	1.5	1.5	1.5
15	22.0	1.5	-20.5	2.2	0.7	19.8
16	0.0	0.0	0.0	0.0	0.0	0.0
17	1.6	11.2	9.6	14.7	3.5	13.1
18	5.8	7.8	2.0	3.2	-4.6	-2.6
19	20.2	6.3	-13.9	24.6	18.3	4.4
20	0.0	1.5	1.5	0.7	-0.8	0.7
21	4.8	0.8	-4.0	25.0	24.2	20.2
22	0.0	6.5	6.5	11.6	5.1	11.6
23	0.0	0.0	0.0	0.0	0.0	0.0
24	25.5	0.0	-25.5	0.0	0.0	-25.5
25	nil	0.0	0.0	0.0	0.0	0.0
26	0.0	2.4	2.4	2.0	-0.4	2.0
27	0.0	5.6	5.6	3.2	-2.4	3.2
28	0.0	0.0	0.0	1.6	1.6	1.6
29	9.3	4.1	-5.2	2.5	-1.6	6.8
30	34.9	18.0	-16.9	37.0	19.0	2.1
31	27.0	3.6	-23.4	12.7	9.1	-14.3
32	15.2	0.0	-15.2	0.0	0.0	-15.2
33	2.3	0.0	-2.3	0.0	0.0	-2.3
34	18.0	11.4	-6.6	5.1	-6.3	-12.9
35	36.0	12.4	-23.6	26.2	13.8	-3.8
36	15.2	12.3	-2.9	18.6	6.3	3.4
37	0.0	0.0	0.0	12.0	12.0	12.0
38	18.1	7.8	-10.3	20.5	12.7	2.4
39	0.0	0.0	0.0	0.7	0.7	0.7
40	17.6	0.0	-17.6	1.0	1.0	-16.6
41	0.0	1.4	1.4	0.8	-0.6	0.8
42	nil	0.0	0.0	0.0	0.0	0.0
43	15.7	1.0	-14.7	1.5	0.5	-14.2
44	10.2	7.3	-2.9	3.9	-3.4	-6.3
45	31.2	12.0	-19.2	2.6	-9.4	-28.6
46	55.1	39.0	-16.1	56.7	17.7	1.6
47	29.0	31.9	2.9	38.2	6.3	9.2
48	2.8	0.0	-2.8	4.7	4.7	1.9
49	41.4	14.9	-26.5	27.8	12.9	-13.6
50	0.0	0.0	0.0	0.0	0.0	0.0
51	0.0	0.0	0.0	7.8	7.8	7.8
52	0.0	0.0	0.0	18.0	18.0	18.0
53	81.7	14.0	-67.7	27.0	13.0	-54.7
54	nil	0.0	0.0	1.4	1.4	1.4
55	0.0	1.2	1.2	0.0	-1.2	0.0
56	11.3	5.0	-6.3	8.4	3.4	-2.9
57	nil	4.7	4.7	0.0	-4.7	0.0
58	63.5	11.3	-52.2	27.0	15.7	-36.5

Block	1847	1901	Change '47-'01	1954	Change '01-'54	Change '47-'54
59	0.0	0.0	0.0	0.0	0.0	0.0
60	17.5	16.2	-1.3	52.3	36.1	34.8
61	0.0	0.7	0.7	3.3	2.8	3.3
62	10.8	1.0	-9.8	0.0	-1.0	-10.8
63	0.0	19.0	19.0	8.6	-10.4	8.6
64	28.0	20.2	-7.8	43.1	22.9	15.1
65	16.4	16.6	0.2	29.5	12.9	13.1
66	17.9	8.0	-9.9	3.3	-4.7	-14.6
67	19.3	6.0	-13.3	24.1	18.1	4.8
68	39.5	52.0	12.5	57.2	5.2	17.7
69	56.3	58.0	1.7	52.4	-5.6	-3.9
70	48.7	30.1	-18.6	47.7	17.6	-1.0
71	19.5	17.9	-1.6	14.9	-3.0	-4.6
72	60.5	40.0	-20.5	58.4	18.4	-2.1
73	39.5	75.5	36.0	9.0	-66.5	-30.5
74	74.6	36.4	-38.2	58.5	22.1	-16.1
75	?					
76	0.0	71.1	71.1	13.8	-57.3	13.8
77	20.4	2.0	-18.4	15.9	13.9	-4.5
78	14.8	10.7	-4.1	27.9	17.2	13.1
79	10.7	9.2	-1.5	22.7	13.5	12.0
80	10.0	14.4	4.4	31.1	16.7	21.1
81	50.9	31.9	-19.0	17.9	-14.0	-33.0
82	42.4	27.7	-14.7	46.5	18.8	4.1
83	47.1	37.4	-9.7	53.3	15.9	6.2
84	55.7	62.4	6.7	78.4	16.0	22.7
85	56.6	66.2	9.6	81.0	14.8	24.4
86	61.1	44.9	-16.2	45.4	0.5	-15.7
87	0.0	?	?	0.0	?	0.0
88	100.0	37.4	-62.6	34.9	-2.5	-65.1
89	44.0	19.1	-24.9	31.2	12.1	-12.8
90	11.9	10.3	-1.6	51.1	40.8	39.2
91	9.0	8.5	-0.5	3.6	-4.9	-5.4
92	7.0	8.4	1.4	0.7	-7.7	-6.3
93	22.1	4.1	-18.0	45.8	41.7	23.7
94	nil	0.0	0.0	0.0	0.0	0.0
95	30.4	14.8	-15.6	50.6	35.8	20.2
96	3.9	13.0	9.1	10.5	-2.5	6.6
97	30.6	17.5	-13.1	48.3	30.8	17.7
98	34.2	37.5	3.3	53.5	16.0	19.3
99	56.9	56.3	-0.6	78.0	21.7	21.1
100	57.1	63.3	6.2	75.0	11.7	17.9
101	33.9	25.0	-8.9	24.3	-0.7	-9.6
102	9.1	2.2	-6.9	20.7	18.5	11.6
103	14.8	16.3	1.5	22.2	5.9	7.4
104	29.4	11.6	-17.8	30.0	18.4	0.6
105	13.1	4.0	-9.1	2.9	-1.1	-10.2
106	29.5	7.8	-21.7	16.3	8.5	-13.2
107	18.5	41.9	23.4	12.7	-29.2	-5.8
108	62.8	42.7	-20.1	67.4	24.7	4.6
109	86.2	34.5	-51.7	7.4	-27.1	-78.8
110	21.5	73.5	52.0	36.4	-37.1	14.9
111	3.8	4.0	0.2	3.8	-0.2	0.0
112	9.3	2.9	-6.4	11.9	9.0	2.6
113	0.0	11.5	11.5	46.9	35.4	46.9
114	26.1	24.7	-1.4	52.1	27.4	26.0
115	44.5	26.6	-17.9	67.2	40.6	22.7
116	68.7	47.6	-21.1	10.2	-37.4	-58.5
117	nil	59.9	59.9	72.5	12.6	72.5
118	nil	50.1	50.1	47.3	-2.8	47.3
119	nil	0.0	0.0	2.3	2.3	2.3
120	nil	0.0	0.0	0.0	0.0	0.0
121	nil	4.6	4.6	2.2	-2.4	2.2
122	nil	0.0	0.0	0.0	0.0	0.0

APPENDIX XXX

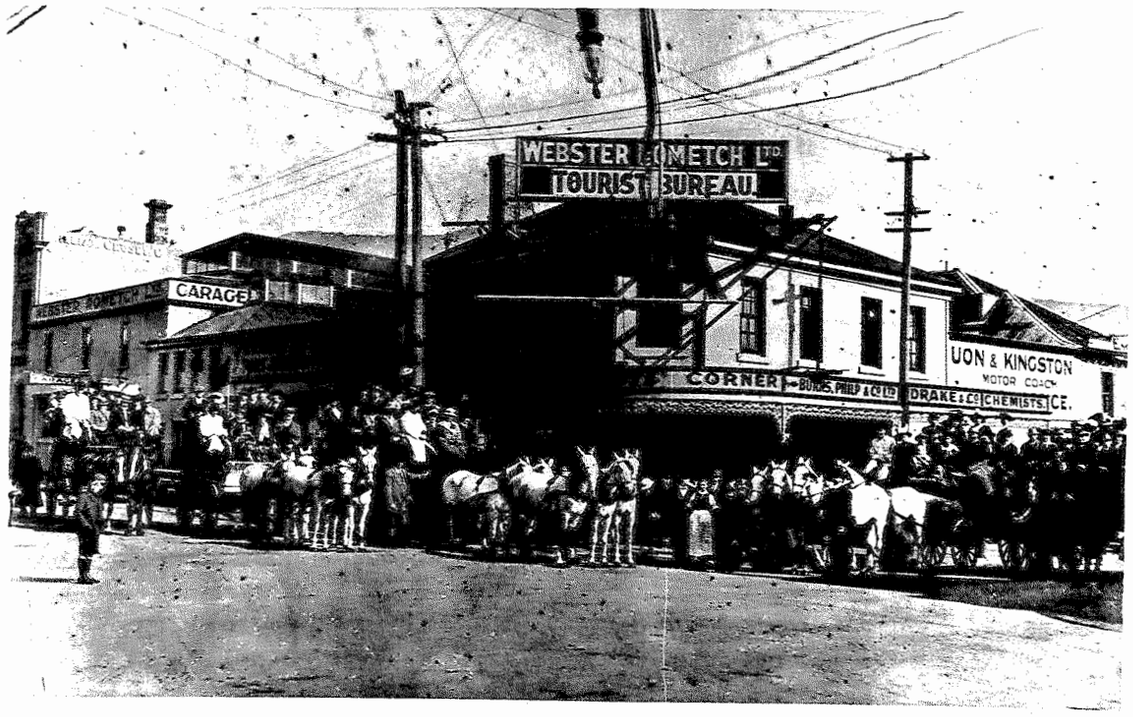
Residential Proportion of Block Total Valuations

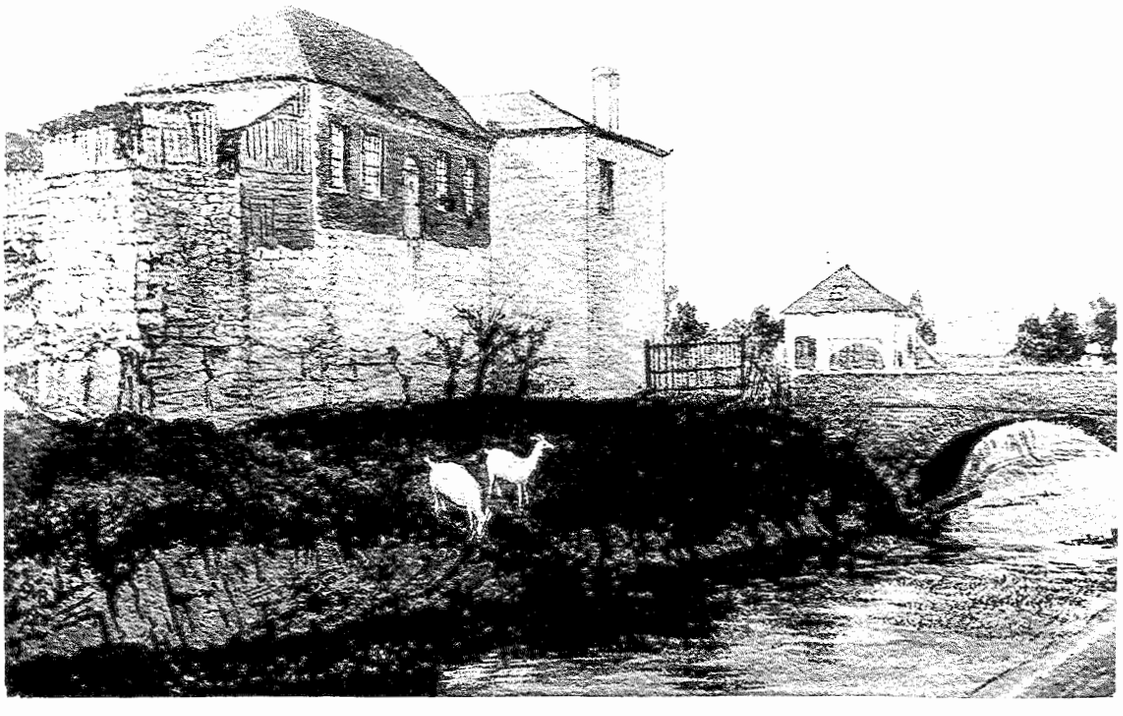
1847 - 1954

Block	1847	1901	Change '47-'01	1954	Change '01-'54	Change '47-'54
1	100.0	91.1	-8.9	98.6	7.5	-1.4
2	100.0	97.3	-2.7	72.2	-25.1	-27.8
3	100.0	97.7	-2.3	99.6	1.9	-0.4
4	100.0	95.2	-4.8	99.4	4.2	-0.6
5	100.0	96.4	-3.6	92.4	-4.9	-7.6
6	100.0	88.0	-12.0	97.1	9.1	-2.9
7	100.0	91.9	-8.1	98.8	6.9	-1.2
8	100.0	91.7	-8.3	88.3	-3.4	-11.7
9	88.2	99.0	+10.8	93.9	-5.1	5.7
10	65.8	96.9	31.1	96.9	0.0	31.1
11	100.0	80.5	-19.5	60.1	-20.4	-39.9
12	80.0	97.8	17.8	93.7	-4.1	13.7
13	100.0	94.4	-5.6	98.3	3.9	-1.7
14	100.0	97.7	-2.3	94.5	-3.2	-5.5
15	78.0	98.5	20.5	97.1	-1.4	19.1
16	100.0	79.2	-20.8	95.8	16.6	-4.2
17	40.9	69.5	28.6	69.5	0.0	28.6
18	94.2	75.2	-19.0	73.8	-1.4	-20.4
19	79.1	90.8	11.7	69.6	-21.2	-9.5
20	100.0	98.5	-1.5	92.1	-6.4	-7.9
21	95.2	97.9	2.7	74.0	-23.9	-21.2
22	100.0	88.7	-11.3	74.6	-14.1	-25.4
23	100.0	98.6	-1.4	99.0	0.4	-1.0
24	74.5	95.5	21.0	97.1	1.6	22.6
25	nil	64.3	64.3	44.9	-19.4	44.9
26	100.0	94.0	-6.0	98.1	4.1	-1.9
27	100.0	94.0	-6.0	95.3	1.3	-4.7
28	100.0	76.2	-23.8	94.8	18.6	-5.2
29	90.7	92.5	1.8	93.8	1.3	3.1
30	65.1	75.8	10.7	36.5	-39.3	-28.6
31	73.0	92.9	19.9	79.6	-13.3	6.6
32	73.7	98.1	24.4	100.0	1.9	26.3
33	92.5	99.6	7.1	100.0	0.4	7.5
34	82.1	87.8	5.7	92.1	4.3	10.0
35	64.0	84.4	20.4	62.0	-22.4	-2.0
36	83.6	85.7	2.1	57.6	-28.1	-26.0
37	35.9	54.5	18.6	39.7	-14.8	-0.2
38	72.2	78.4	6.2	55.7	-22.7	-16.5
39	0.0	88.1	88.1	52.3	-35.8	52.3
40	82.4	99.0	16.6	97.3	-1.7	14.9
41	84.8	95.9	11.1	95.9	0.0	11.1
42	nil	72.6	72.6	6.3	-66.3	6.3
43	84.3	84.9	0.6	88.8	3.9	4.5
44	83.9	90.8	6.9	68.4	-22.4	-15.5
45	68.8	83.2	14.4	81.2	-2.0	12.4
46	41.9	55.5	13.6	27.4	-28.1	-14.5
47	65.1	53.8	-11.3	31.6	-22.2	-33.5
48	86.7	76.6	-10.1	26.0	-50.6	-60.7
49	57.0	82.3	25.3	31.7	-50.6	-25.3
50	100.0	100.0	0.0	36.9	-63.1	-63.1
51	100.0	82.1	-17.9	62.1	-20.0	-37.9
52	100.0	96.1	-3.9	62.6	-33.5	-37.4
53	14.1	67.6	53.5	32.0	-35.6	17.9
54	nil	97.3	97.3	90.2	-7.1	90.2
55	94.0	98.8	4.8	76.0	-22.8	-18.0
56	88.7	92.9	4.2	91.6	-1.3	2.9
57	nil	86.8	86.8	96.9	10.1	96.9
58	34.8	85.6	50.8	69.1	-16.5	34.3
59	100.0	97.2	-2.8	100.0	2.8	0.0
60	82.5	83.2	0.7	47.7	-35.5	-34.8

Block	1847	1901	Change '47-'01	1954	Change '01-'54	Change '47-'54
61	79,8	64.8	-15.0	75.7	10.9	-4.1
62	83.2	87.2	4.0	73.5	-13.7	-9.7
63	100.0	81.0	-19.0	89.5	8.5	-10.5
64	71.4	76.7	5.3	46.5	-30.2	-24.9
65	80.2	71.8	-8.4	66.8	-5.0	-13.4
66	82.1	85.1	3.0	68.6	-16.5	-13.5
67	76.6	86.6	10.0	23.2	-63.4	-43.4
68	59.6	45.5	-14.1	17.0	-28.5	-42.6
69	37.0	34.9	-2.1	6.9	-28.0	-30.1
70	26.4	41.0	14.6	9.4	-31.6	-17.0
71	38.5	41.9	3.4	18.6	-23.3	-19.9
72	0.0	43.3	43.3	18.8	-24.5	18.8
73	7.7	24.5	16.8	2.1	-22.4	-5.6
74	5.4	59.8	54.4	31.7	-28.1	26.3
75	nil					
76	0.0	0.0	0.0	0.0	0.0	0.0
77	32.3	96.1	63.8	78.9	-17.2	46.6
78	87.8	88.4	0.6	69.1	-19.3	-18.7
79	89.2	88.3	-0.9	57.4	-30.9	-31.8
80	90.0	80.6	- 9.4	56.6	-24.0	-33.4
81	49.1	59.6	10.5	38.3	-21.3	-10.8
82	57.6	59.2	1.6	22.9	-36.3	-34.7
83	50.0	47.3	-2.7	17.4	-29.9	-32.6
84	42.6	33.4	-9.2	7.3	-26.1	-35.3
85	39.5	20.3	-19.2	0.3	-20.0	-39.2
86	28.0	13.3	-14.7	2.4	-10.9	-25.6
87	0.0	?	?	2.3	?	2.3
88	0.0	13.2	13.2	1.4	-11.8	1.4
89	56.0	73.2	17.2	67.1	-6.1	11.1
90	97.0	86.3	-10.7	38.1	-48.2	-58.9
91	91.0	91.1	0.1	83.0	- 8.1	-8.0
92	85.7	88.0	2.3	78.6	-9.4	-7.1
93	77.9	86.1	8.2	42.6	-43.5	-35.3
94	nil	94.4	94.4	81.6	-12.8	81.6
95	69.6	83.4	13.8	44.3	-39.1	-25.3
96	96.1	85.3	19.2	43.0	-42.3	-53.1
97	69.4	72.4	3.0	26.3	-46.1	-43.1
98	64.0	53.6	-10.4	11.6	-42.0	-52.4
99	43.2	33.7	- 9.5	4.1	-29.6	-39.1
100	42.3	25.2	-17.1	0.7	-24.5	-41.6
101	46.6	23.5	-23.1	0.5	-23.0	-46.1
102	90.9	92.6	1.7	68.6	-24.0	-22.3
103	85.2	82.2	-3.0	74.0	-8.2	-11.2
104	70.6	88.4	17.8	54.7	-33.7	-15.9
105	44.4	92.1	-47.7	46.1	-46.0	1.7
106	60.2	92.2	32.0	7.6	-84.6	-52.6
107	59.3	39.4	-19.9	13.0	-26.4	-46.3
108	31.0	26.7	-4.3	4.9	-21.8	-26.1
109	13.8	6.3	-7.5	3.1	-3.2	-10.7
110	20.2	8.9	-11.3	5.4	-3.5	-14.8
111	96.2	93.9	-2.3	57.4	-36.5	-38.8
112	90.7	92.0	1.3	54.0	-38.0	-36.7
113	100.0	86.6	-13.4	38.0	-48.6	-62.0
114	59.6	50.9	-8.7	19.1	-31.8	-40.5
115	44.3	39.3	-5.0	3.4	-35.9	-40.9
116	8.0	19.0	11.0	0.0	-19.0	-8.0
117	nil	4.1	4.1	0.0	-4.1	0.0
118	nil	0.0	0.0	2.0	2.0	2.0
119	nil	100.0	100.0	97.7	-2.3	97.7
120	nil	100.0	100.0	100.0	0.0	100.0
121	nil	92.6	92.6	97.1	4.5	97.1
122	nil	97.0	97.0	99.4	2.4	99.4

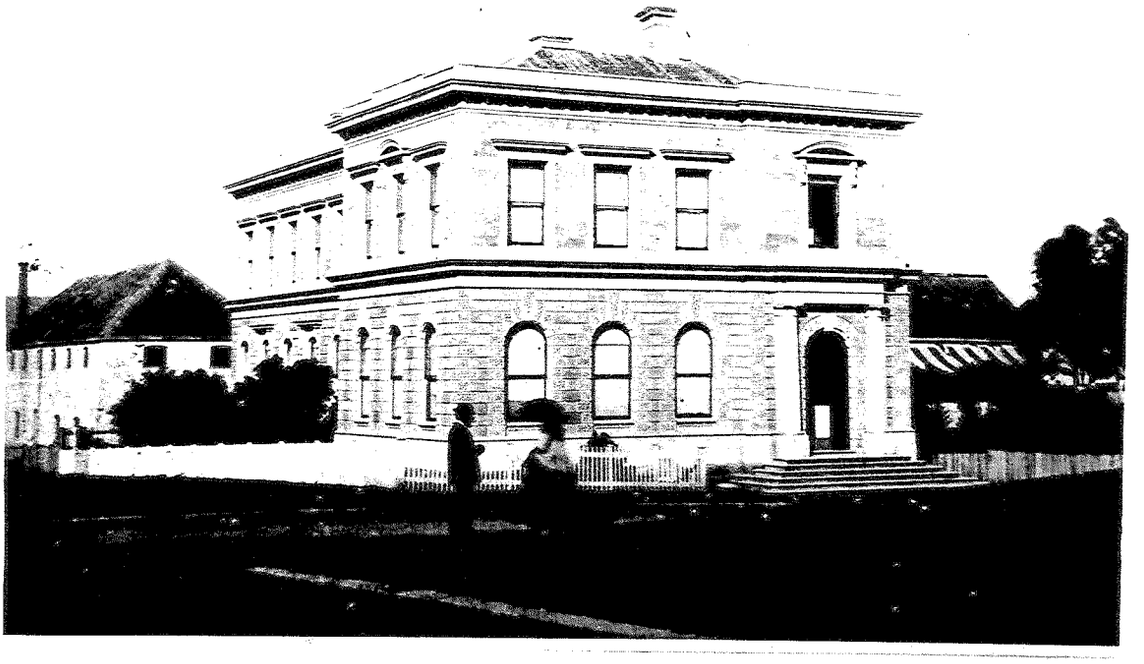
APPENDIX XXXI

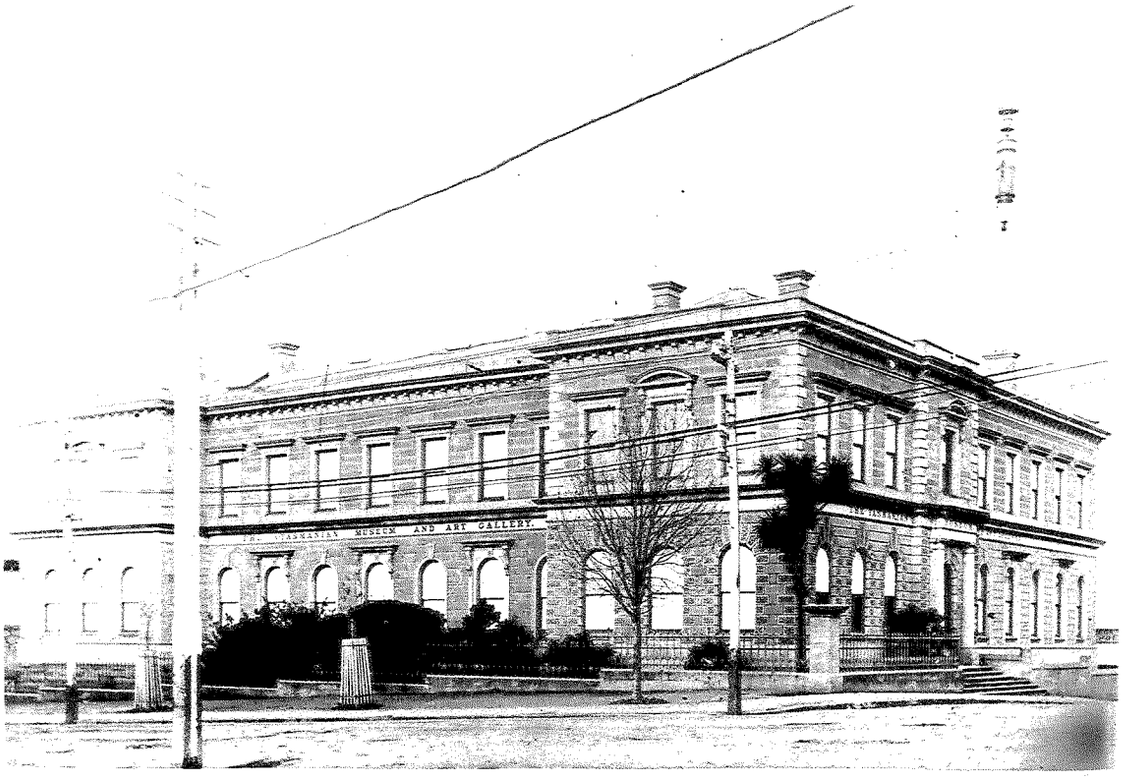




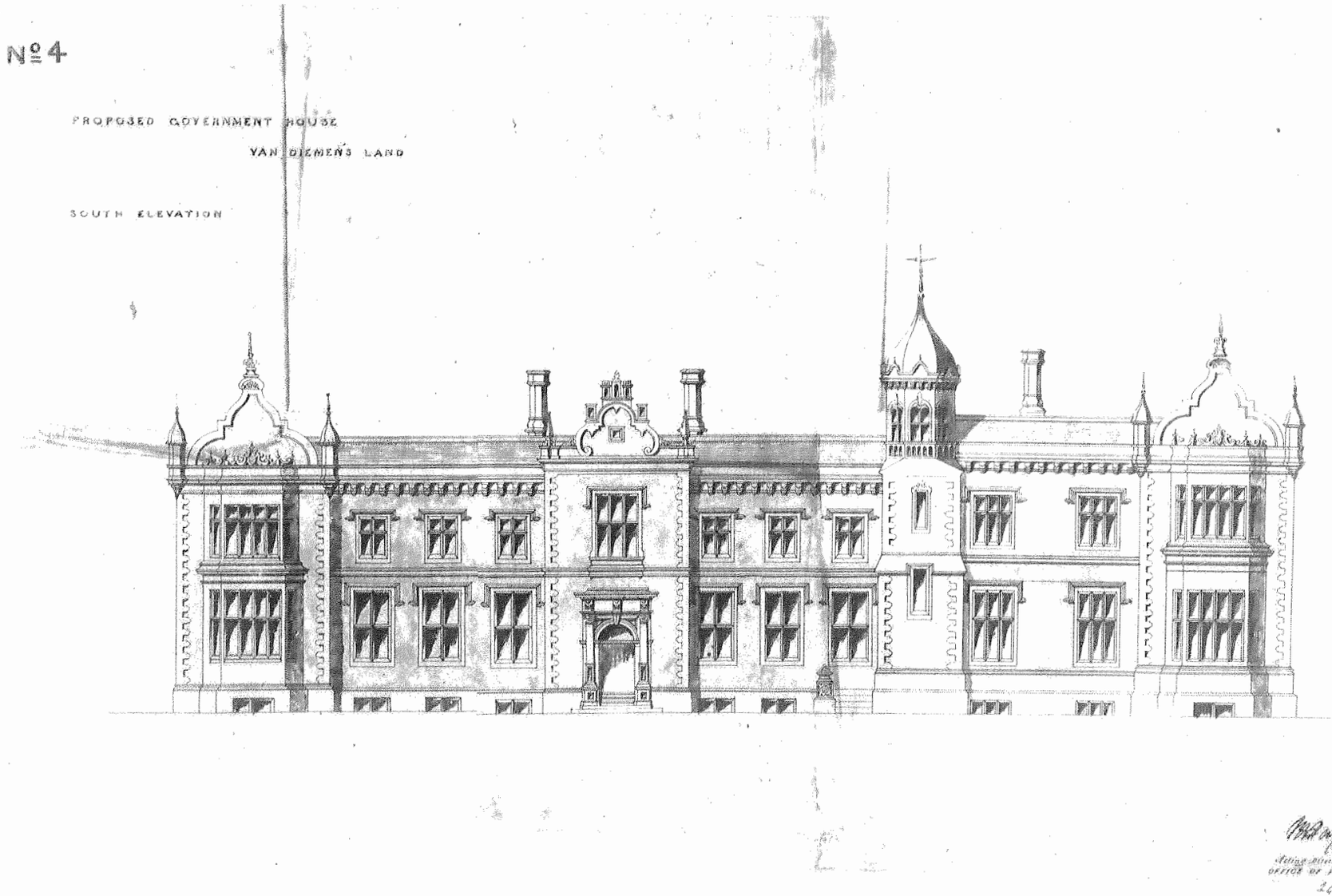
Tourist Bureau in 1905, and Capt. Kelly's house (demolished 1938) on the Campbell - Collins corner in 1880.
(Tasmanian Museum collection)

APPENDIX XXXII

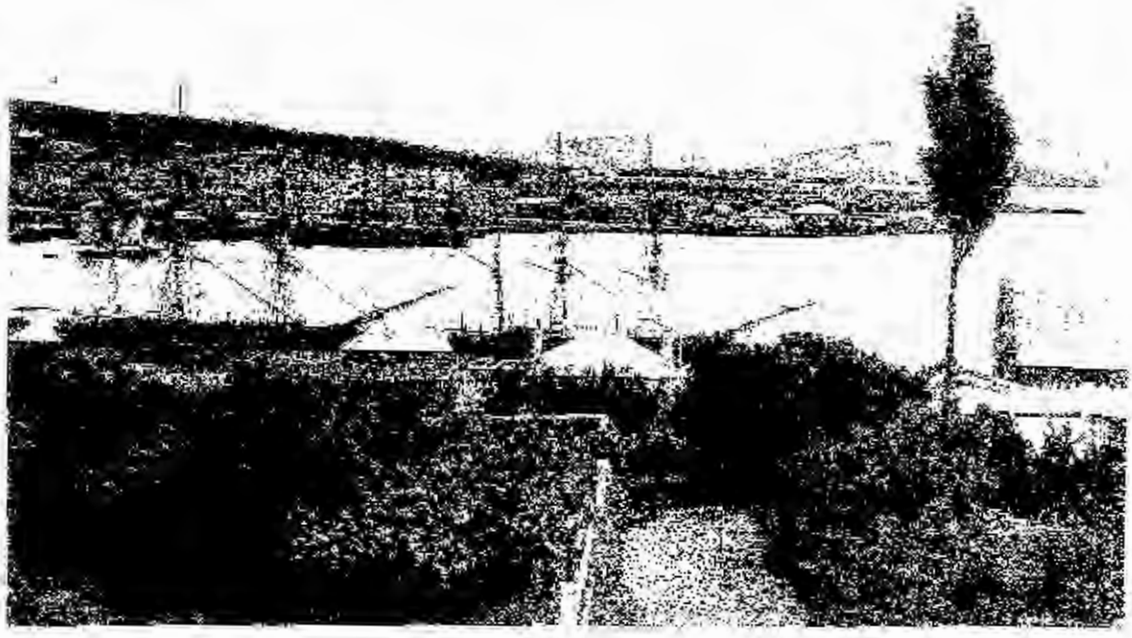




Tasmanian Museum, Macquarie and Argyle Streets, before 1886 (top) and after 1901 with two additional wings.
(Tasmanian Museum collection)



Plan for new Government House, 1854 (MPG 716/5, Public Record Office)



The ports from Battery Point to Old and Lake.
(Photograph Courtesy Collection)

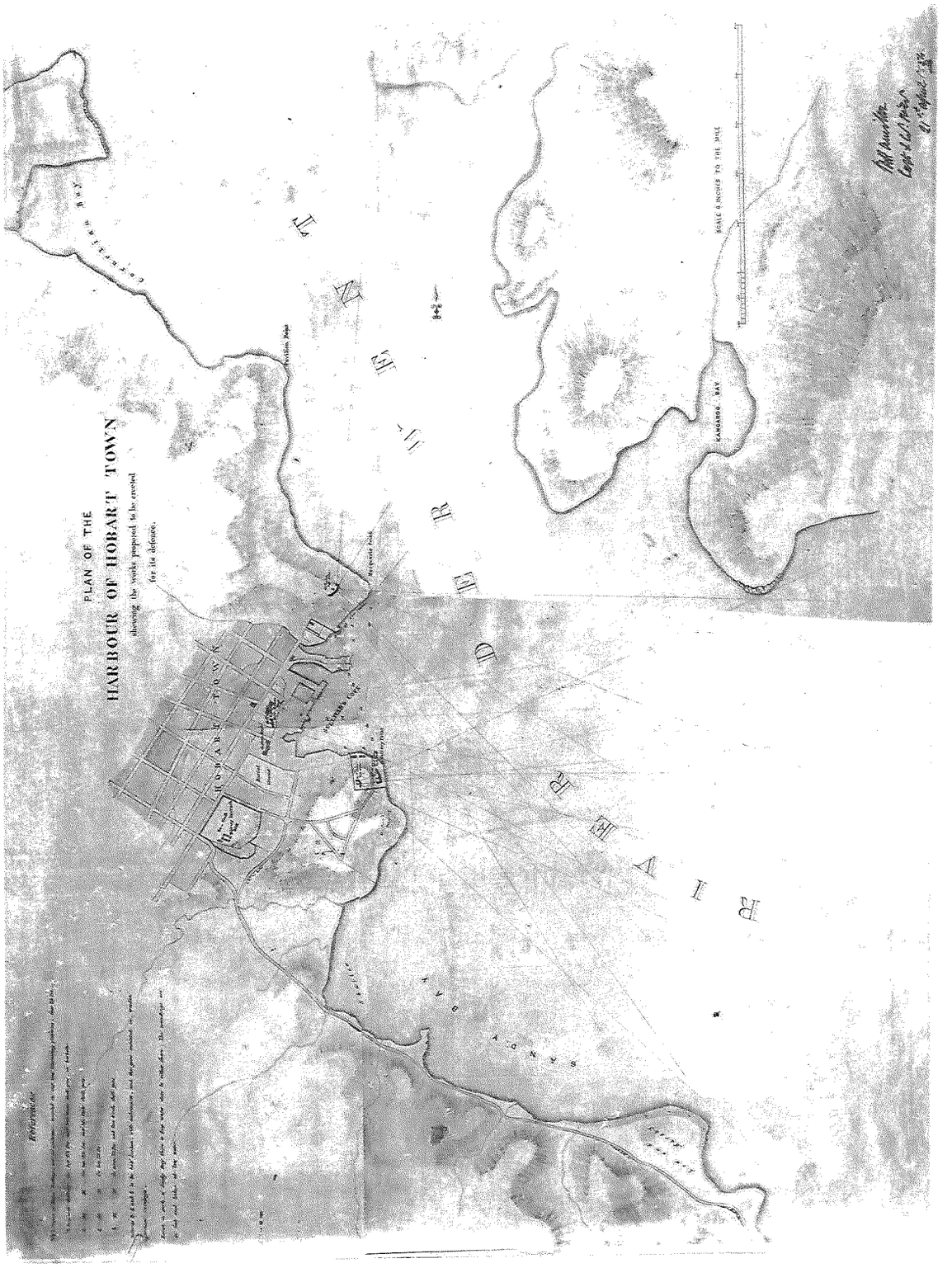
Composition of Inward Commodities by Frequency of Arrival 1827-1960

Year	Percentage in Group Number									
	1	2	3	4	5	6	7	8	9	10
1827	12.1	61.4	20.0	1.4	—	—	1.3	—	—	4.0
1835	35.3	21.3	13.7	4.3	0.9	16.1	4.0	—	—	4.6
1854	32.7	26.2	6.5	1.3	2.4	25.7	2.3	0.7	—	2.1
1872	27.6	29.4	5.4	10.1	3.6	7.2	11.6	0.4	—	4.7
1892	37.1	38.4	0.9	—	—	10.9	11.8	0.2	—	0.7
1908	34.4	43.8	6.6	—	0.5	0.2	7.8	2.6	—	4.1
1918/19	17.5	46.0	15.0	0.3	0.3	0.6	13.8	5.4	0.6	0.6
1938/39	12.6	49.0	10.2	—	0.7	0.2	8.9	11.7	—	6.6
1944/45	2.2	44.9	6.0	—	—	—	19.7	25.2	0.5	1.6
1960/61	2.0	51.9	4.5	—	0.8	—	8.8	19.0	2.9	10.2

1. Passengers & convicts
2. General cargo
3. Foodstuffs
4. Whale oil
5. Wool, hides
6. Livestock
7. Fuels
8. Chemicals & metals
9. Newsprint
10. Building materials

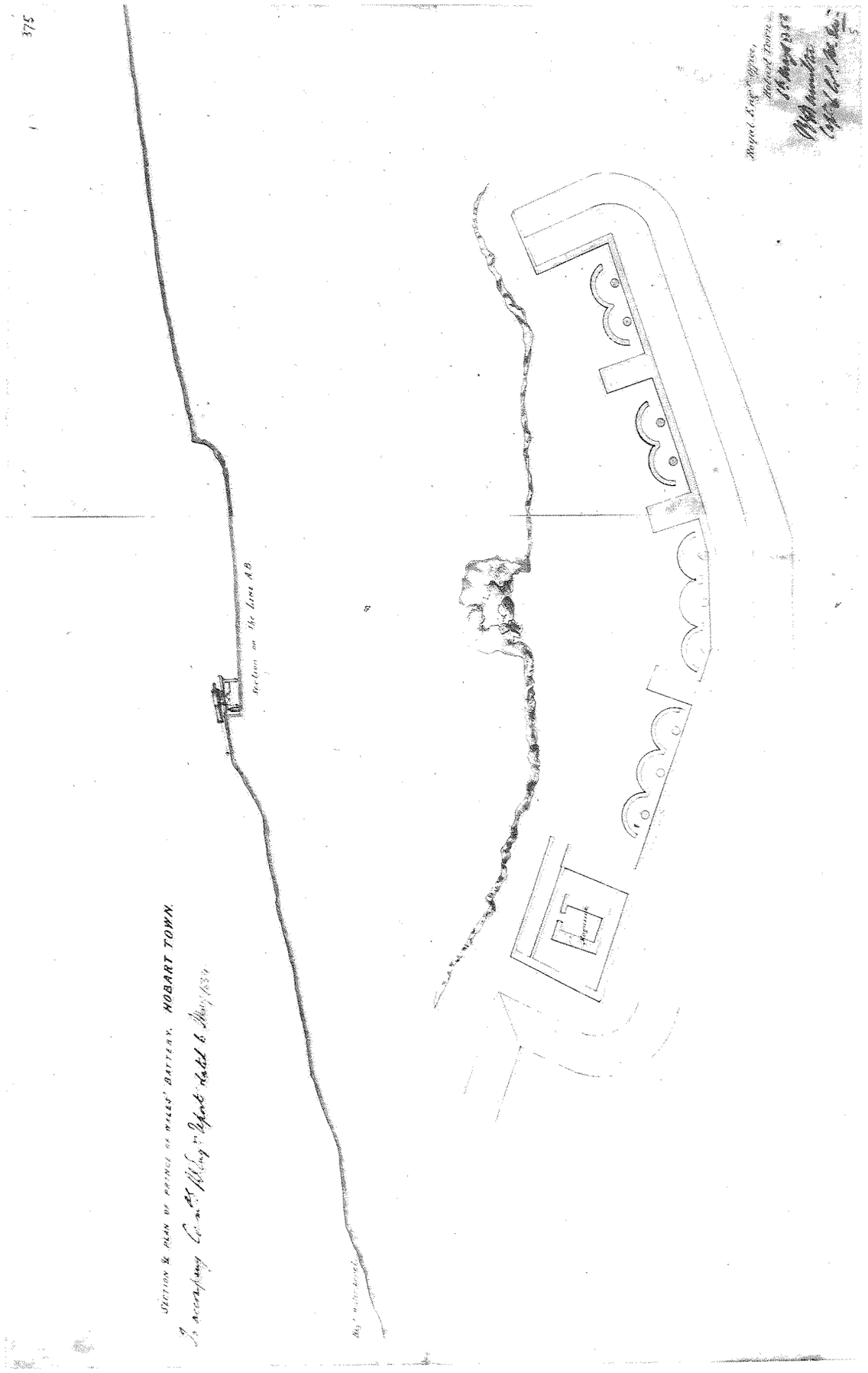
Source: Records of ships entered in and cleared out at Hobart Town 1824-30 and Reports of Ships' Arrivals

APPENDIX XXXVI



Hobart harbour defence proposals, 1854
(MPG 715, Public Record Office)

APPENDIX XXXVII



Prince of Wales' Battery
(MR 414/5, Public Record Office)

APPENDIX XXXVIII

Decile Rank 1847-1901-1954

Block	1847	1901	1954	Change '47-'01	Change '01-'54	Change '47-'54
1	7	1	4	-6	3	-3
2	5	5	4	0	-1	-1
3	5	3	3	-2	0	-2
4	1	2	2	1	0	1
5	2	1	1	-1	0	-1
6	1	2	2	1	0	1
7	1	3	2	2	-1	1
8	4	2	2	-2	0	-2
9	2	4	2	2	-2	0
10	4	4	3	0	-1	-1
11	3	1	5	-2	4	2
12	1	1	2	0	1	1
13	1	4	3	3	-1	2
14	2	5	1	3	-4	-1
15	4	3	1	-1	-2	-3
16	7	5	1	-2	-4	-6
17	9	6	2	-3	-4	-7
18	5	7	5	2	-2	0
19	5	3	5	-2	2	0
20	8	8	5	0	-3	-3
21	7	8	6	1	-2	-1
22	8	9	8	1	-1	0
23	8	8	7	0	-1	-1
24	6	6	4	0	-2	-2
25	0	6	8	6	2	8
26	1	3	4	2	1	3
27	3	3	2	0	-1	-1
28	4	5	4	1	-1	0
29	1	2	3	1	1	2
30	3	3	7	0	4	4
31	1	3	1	2	-2	0
32	3	4	3	1	-1	0
33	3	4	1	1	-3	-2
34	1	2	2	1	0	1
35	4	1	4	-3	3	0
36	2	2	1	0	-1	-1
37	10	9	8	-1	-1	-2
38	8	9	7	1	-2	-1
39	10	8	8	-2	0	-2
40	1	4	2	3	-2	1
41	3	4	3	1	-1	0
42	0	9	9	9	0	9
43	2	3	3	1	0	1
44	2	3	4	1	1	2
45	2	2	3	0	1	1
46	4	5	7	1	2	3
47	6	7	6	1	-1	0
48	9	10	9	1	-1	0
49	8	9	9	1	0	1
50	4	8	9	4	1	5
51	7	9	6	2	-3	-1
52	10	8	6	-2	-2	-4
53	10	7	8	-3	1	-2
54	0	6	4	6	-2	4
55	7	7	5	0	-2	0
56	8	5	1	-3	-4	-7
57	0	2	1	2	-1	1
58	9	5	5	-4	0	-4
59	5	5	3	0	-2	-2
60	5	2	7	-3	5	2
61	9	5	2	-4	-3	-7
62	8	8	7	0	-1	-1
63	1	1	3	0	2	2

Block	1847	1901	1954	Change '47-'01	Change '01-'54	Change '47-'54
64	2	1	5	-1	4	3
65	3	3	1	0	-2	-2
66	6	5	5	-1	0	-1
67	3	1	7	-2	6	4
68	6	9	8	3	-1	2
69	6	9	9	3	0	3
70	9	10	9	1	-1	0
71	10	10	9	0	-1	-1
72	10	8	7	-2	-1	-3
73	10	10	10	0	0	0
74	10	6	6	-4	0	-4
75	0	0	0	0	0	0
76	7	1	7	-6	6	0
77	8	1	1	-7	0	-7
78	2	4	5	2	1	3
79	4	3	5	-1	2	1
80	3	2	6	-1	4	3
81	5	7	6	2	-1	1
82	5	5	8	0	3	3
83	7	8	8	1	0	1
84	9	10	10	1	0	1
85	8	10	10	2	0	1
86	9	10	10	1	0	1
87	10	0	10	?	?	0
88	10	9	10	-1	1	0
89	4	6	5	2	-1	1
90	2	4	7	2	3	5
91	6	9	5	3	-4	-1
92	3	1	1	-2	0	-2
93	5	7	6	2	-1	1
94	0	3	4	3	1	4
95	2	4	7	2	3	5
96	7	6	7	-1	1	0
97	6	7	8	1	1	2
98	5	7	8	2	1	3
99	7	9	10	2	1	3
100	8	10	10	2	0	2
101	9	10	10	1	0	1
102	4	2	4	-2	2	0
103	3	1	3	-2	2	0
104	6	6	6	0	0	0
105	9	6	6	-3	0	-3
106	7	8	10	1	2	3
107	6	5	10	-1	5	4
108	7	9	9	2	0	2
109	10	10	9	0	-1	-1
110	8	7	6	-1	-1	-2
111	4	4	6	0	2	2
112	5	4	5	-1	1	0
113	9	7	8	-2	1	-1
114	6	6	8	0	2	2
115	6	8	9	2	1	3
116	9	9	10	0	1	1
117	-	10	9	10	-1	9
118	-	10	9	10	-1	9
119	-	7	4	7	-3	4
120	-	7	3	7	-4	3
121	-	6	3	6	-3	3
122	-	6	4	6	-2	4

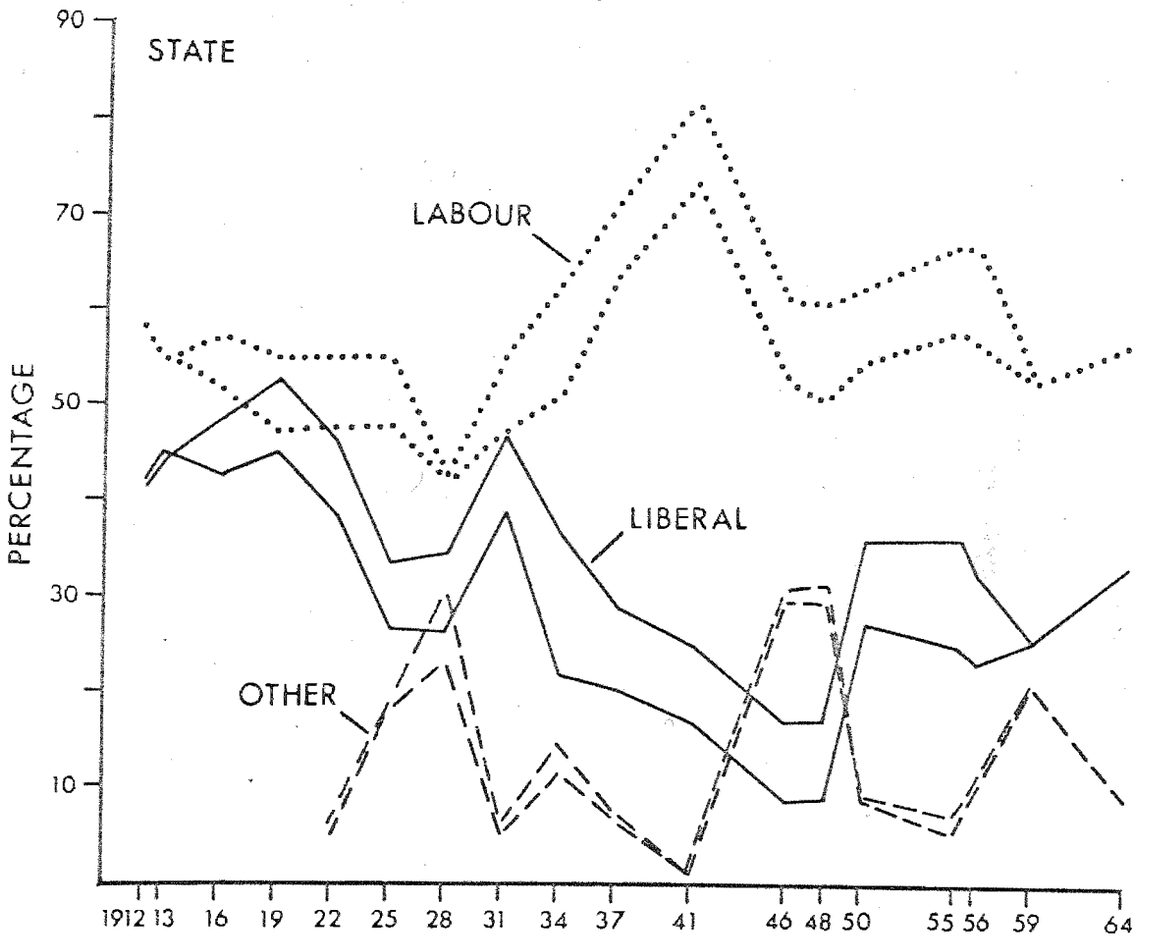
APPENDIX XXXIX

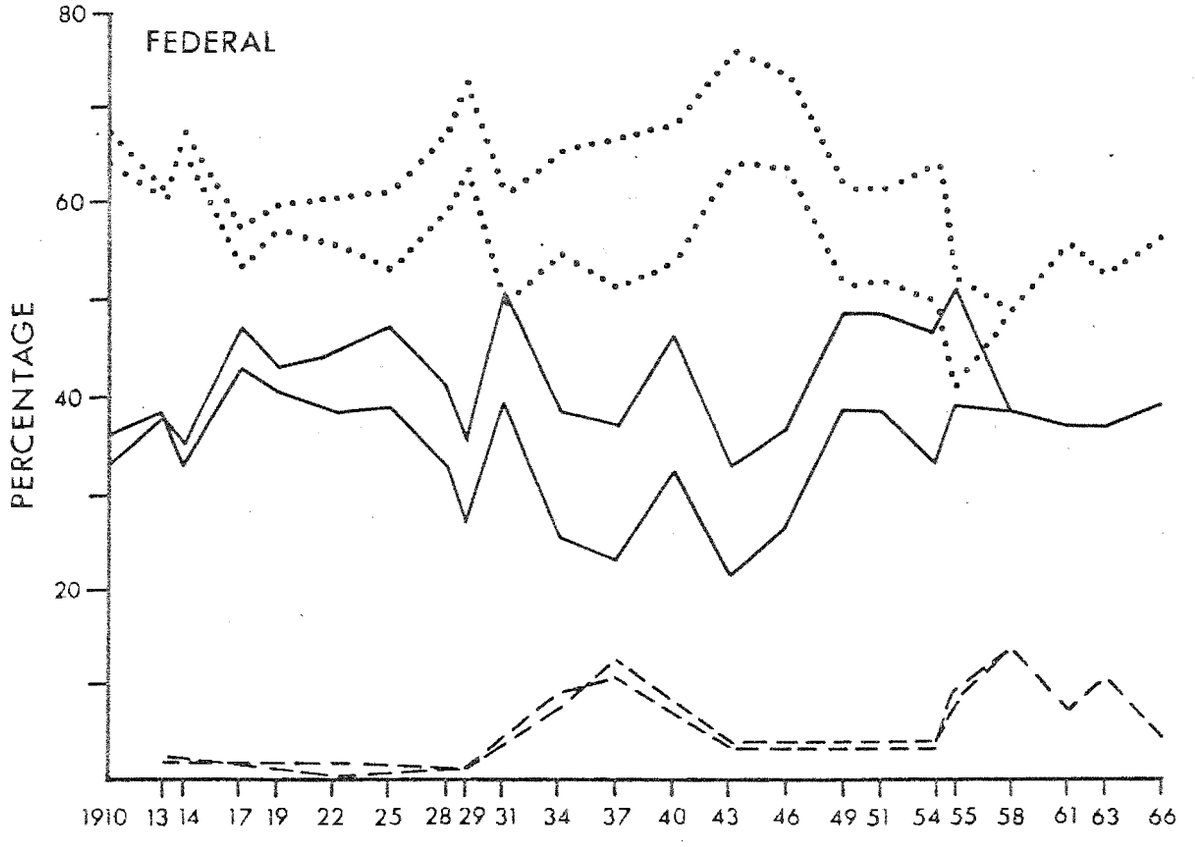
Residential rank (quintile) 1847-1901-1954

Block	1847 Value	1847 Rank	1901 Value	1901 Rank	1954 Value	1954 Rank	Change '47-'01	Change '01-'54	Change '47-'54
1	35.0	4	22.8	3	68.5	4	-1	+1	0
2	24.0	3	26.1	4	61.2	4	1	0	1
3	21.0	3	21.5	2	62.3	4	-1	2	1
4	12.0	1	19.8	2	57.0	3	1	1	2
5	14.5	2	18.2	1	50.5	1	-1	0	-1
6	10.0	1	19.8	2	56.3	3	1	1	2
7	12.1	1	24.4	3	56.8	3	2	0	2
8	20.0	3	24.2	3	53.4	2	0	-1	-1
9	13.4	1	24.1	3	54.8	2	2	-1	1
10	17.6	2	21.1	2	54.3	2	0	0	0
11	16.2	2	15.7	1	53.0	2	-1	1	0
12	10.8	1	18.1	1	49.6	1	0	0	0
13	12.9	1	22.3	3	56.7	3	2	0	2
14	16.0	2	28.4	4	51.6	2	2	-2	0
15	16.7	2	20.0	2	49.7	1	0	-1	-1
16	31.0	4	28.5	4	47.7	1	0	-3	-3
17	41.5	5	21.8	2	55.0	2	-3	0	-3
18	22.6	3	26.2	4	62.6	4	1	0	1
19	19.8	3	20.1	2	53.9	2	-1	0	-1
20	39.1	5	39.6	5	62.9	4	0	-1	-1
21	36.2	5	42.9	5	70.1	4	0	-1	-1
22	48.2	5	60.0	5	94.9	5	0	0	0
23	44.4	5	60.0	5	92.3	5	0	0	0
24	19.4	3	29.4	4	65.2	4	1	0	1
25	nil	0	27.0	4	76.9	5	4	1	5
26	10.3	1	20.7	2	60.5	3	1	1	2
27	16.3	2	21.1	2	54.3	2	0	0	0
28	20.0	3	22.3	3	71.0	4	0	1	1
29	12.2	1	19.9	2	58.1	3	1	1	2
30	14.0	1	24.5	3	54.9	2	2	-1	1
31	9.0	1	19.6	2	35.4	1	1	-1	0
32	13.6	1	25.5	3	57.9	3	2	0	2
33	16.9	2	23.2	3	50.0	1	1	-2	-1
34	11.9	1	18.1	1	48.9	1	0	0	0
35	14.9	2	14.4	1	43.9	1	-1	0	-1
36	14.9	2	16.5	1	39.7	1	-1	0	-1
37	41.3	5	50.5	5	69.4	4	0	-1	-1
38	44.0	5	44.3	5	83.5	5	0	0	0
39	0	0	44.6	5	101.6	5	5	0	5
40	10.3	1	24.1	3	54.5	2	2	-1	1
41	18.7	2	23.2	3	52.2	2	1	-1	0
42	nil	0	100.0	5	152.0	5	5	0	5
43	13.5	1	20.1	2	55.9	2	1	0	1
44	13.3	1	20.7	2	53.8	2	1	0	1
45	11.8	1	16.0	1	51.7	2	0	1	1
46	14.2	1	15.5	1	51.9	2	0	1	1
47	24.1	4	20.5	2	56.4	3	-2	1	-1
48	62.0	5	75.2	5	147.8	5	0	0	0
49	40.2	5	41.6	5	94.8	5	0	0	0
50	20.5	3	37.2	5	79.3	5	2	0	2
51	30.5	4	44.9	5	70.7	4	1	-1	0
52	85.0	5	41.9	5	68.7	4	0	-1	-1
53	40.1	5	25.5	3	62.5	4	-2	1	-1
54	nil	0	27.7	4	60.5	3	4	-1	3
55	29.2	4	32.5	4	62.0	4	0	0	0
56	45.0	5	22.9	3	48.9	1	-2	-2	-4
57	nil	0	18.3	1	42.0	1	1	0	1
58	26.1	4	24.0	3	50.5	1	-1	-2	-3
59	23.7	3	26.5	4	57.1	3	1	-1	0

Block	1847 Value	Rank	1901 Value	Rank	1954 Value	Rank	Change '47-'01	Change '01-'54	Change '47-'54
60	19.3	3	19.1	1	60.1	3	-2	2	0
61	66.0	5	22.5	3	50.8	2	-2	-1	-3
62	46.8	5	46.5	5	83.7	5	0	0	0
63	8.8	1	11.0	1	55.9	2	0	1	1
64	12.7	1	16.1	1	46.3	1	0	0	0
65	14.5	2	16.0	1	42.2	1	-1	0	-1
66	25.1	4	22.5	3	59.6	3	-1	0	-1
67	16.2	2	15.8	1	75.4	4	-1	3	2
68	22.2	3	28.9	4	47.6	1	1	-3	-2
69	18.6	2	25.7	4	68.7	4	2	0	2
70	40.8	5	37.6	5	83.2	5	0	0	0
71	79.0	5	56.2	5	78.8	5	0	0	0
72	0	0	38.4	5	56.4	3	5	-2	3
73	29.0	4	21.7	2	56.8	3	-2	1	-1
74	80.0	5	24.4	3	44.9	1	-2	-2	-4
75	nil								
76	0	0	0				0	0	0
77	19.0	3	16.6	1	43.9	1	-2	0	-2
78	13.1	1	21.0	2	57.8	3	1	1	2
79	19.3	3	20.4	2	51.5	2	-1	0	-1
80	17.4	2	17.3	1	53.1	2	-1	1	0
81	21.6	3	22.2	2	52.4	2	-1	0	-1
82	19.1	3	17.6	1	72.3	4	-2	3	1
83	26.0	4	26.2	4	90.1	5	0	1	1
84	40.7	5	48.5	5	129.4	5	0	0	0
85	29.1	4	63.3	5	90.5	5	1	0	1
86	31.3	4	42.7	5	81.3	5	1	0	1
87	0	0	?	?	65.0	4	?	?	4
88	0	0	21.3	2	83.7	5	2	3	5
89	14.8	2	22.9	3	56.0	3	1	0	1
90	14.9	2	21.1	2	62.5	4	0	2	2
91	28.2	4	47.5	5	71.1	4	1	-1	0
92	15.8	2	15.3	1	42.9	1	-1	0	-1
93	25.1	4	31.2	4	66.4	4	0	0	0
94	nil	0	20.9	2	58.0	3	2	1	3
95	14.1	1	22.2	2	58.8	3	1	1	2
96	35.3	4	27.5	4	73.7	4	0	0	0
97	24.1	4	24.9	3	63.9	4	-1	1	0
98	20.0	3	23.2	3	48.7	1	0	-2	-2
99	27.2	4	27.9	4	81.1	5	0	1	1
100	34.5	4	40.9	5	125.5	5	1	0	1
101	51.6	5	43.5	5	48.5	1	0	-4	-4
102	18.2	2	18.4	1	49.8	1	-1	0	-1
103	15.3	2	15.1	1	45.7	1	-1	0	-1
104	26.1	4	25.4	3	55.9	2	-1	-1	-2
105	26.3	4	27.7	4	56.6	3	0	-1	-1
106	25.5	4	34.6	4	75.7	5	0	1	1
107	19.9	3	14.7	1	405.7	5	-2	4	2
108	17.8	2	19.4	2	88.3	5	0	3	3
109	40.0	5	30.0	4	52.0	2	-1	-2	-3
110	19.0	3	30.0	4	101.0	5	1	1	2
111	18.7	2	24.0	3	59.1	3	1	0	1
112	25.7	4	23.3	3	51.6	2	-1	-1	-2
113	58.5	5	29.5	4	109.1	5	-1	1	0
114	19.2	3	16.0	1	57.1	3	-2	2	0
115	15.4	2	20.0	2	57.0	3	0	1	1
116	23.3	3	18.0	1	0	0	-2	-1	-3
117	nil	0	24.0	3	0	0	3	-3	0
118	nil	0	0	0	50.0	1	0	1	1
119	nil	0	31.8	4	64.9	4	4	0	4
120	nil	0	34.6	4	54.8	2	4	-2	2
121	nil	0	28.9	4	53.3	2	4	-2	2
122	nil	0	29.7	4	60.6	4	4	0	4

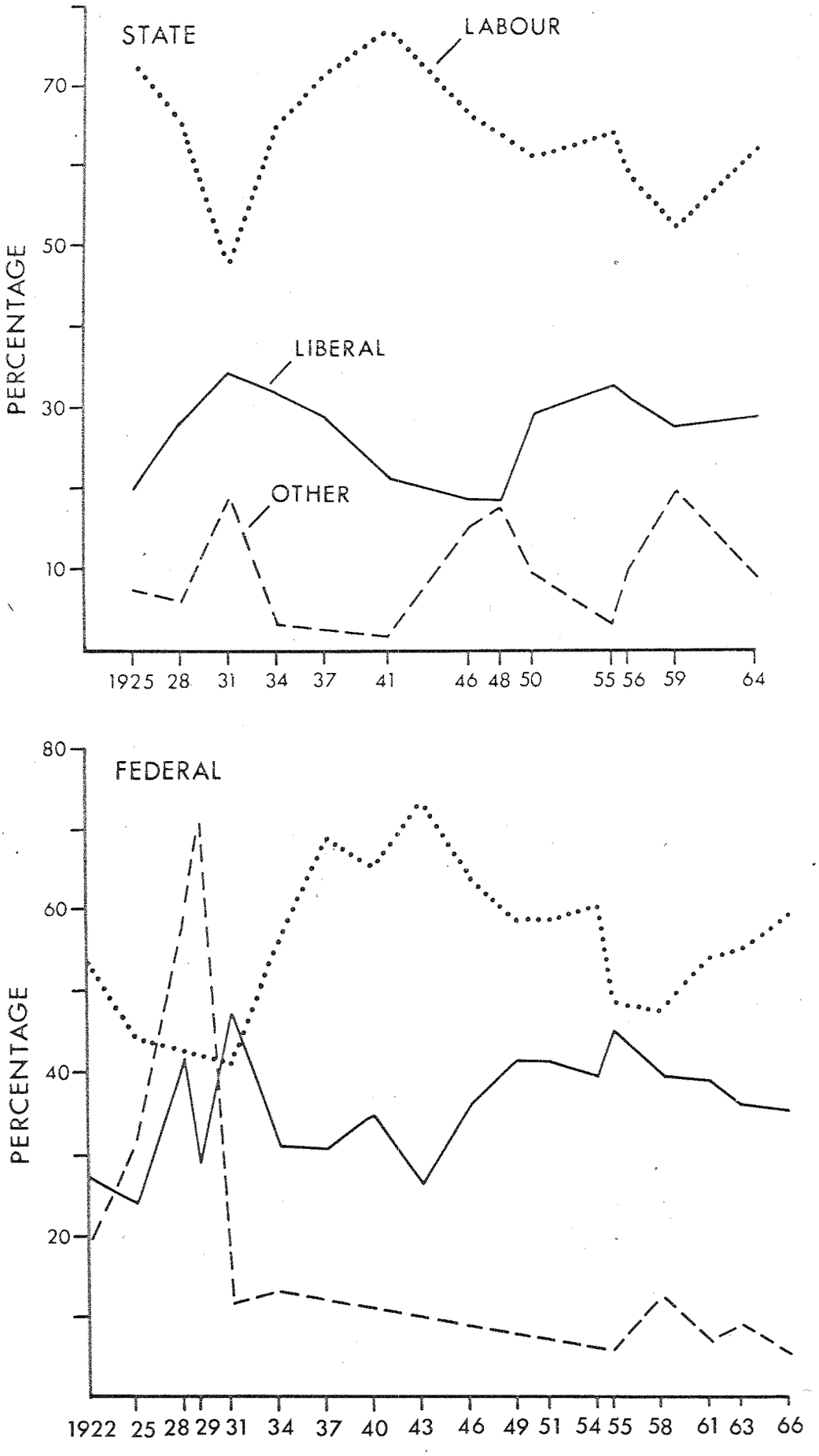
APPENDIX XL





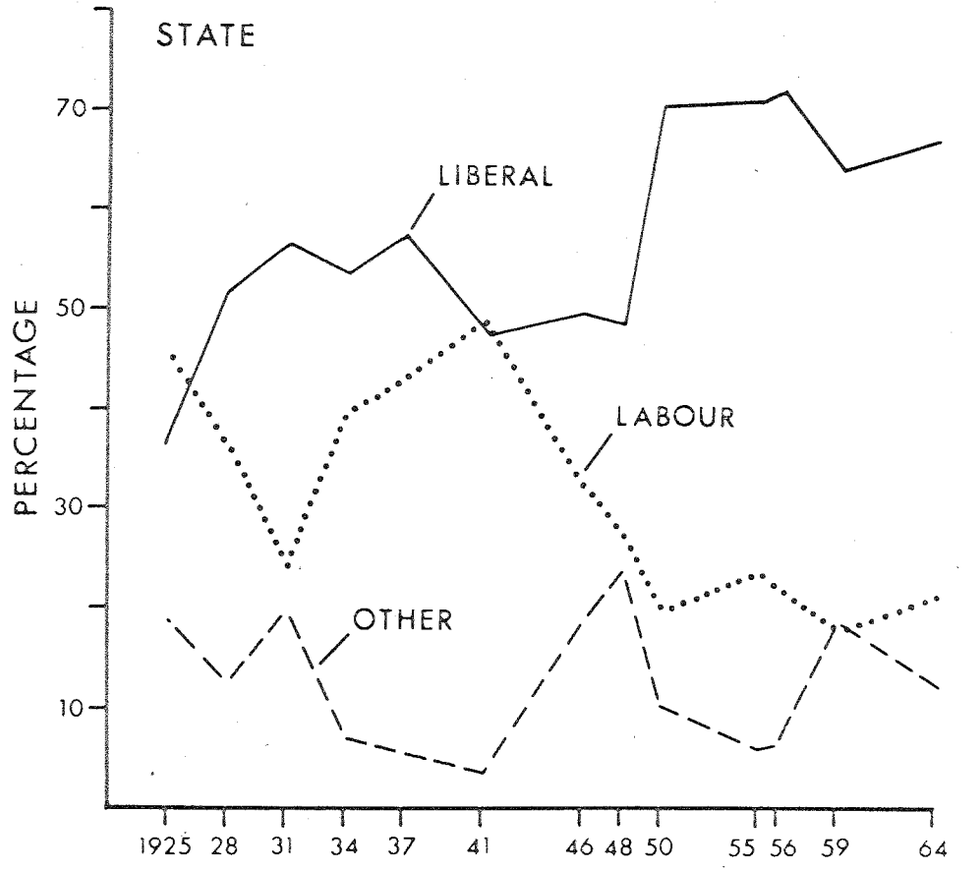
State and Federal political affiliation in the Hobart subdivision, 1910 - 1966. (Electoral Returns)

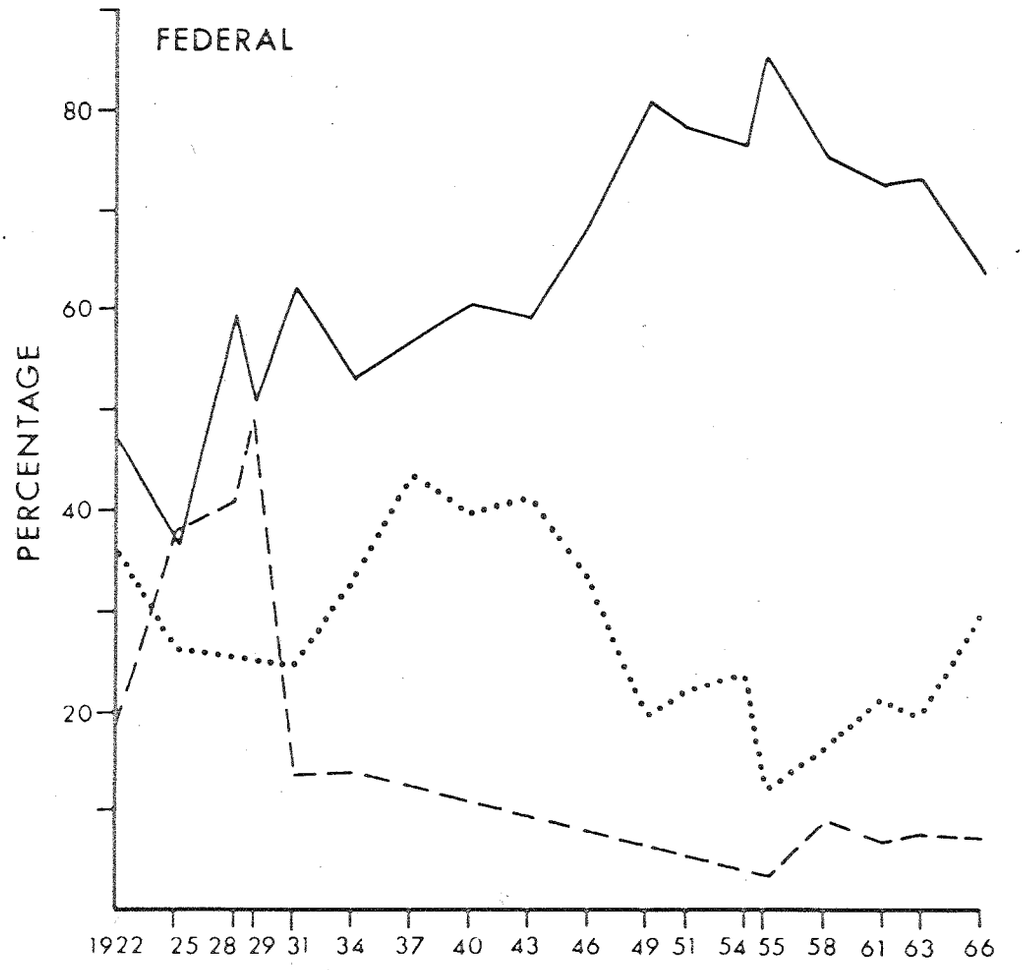
APPENDIX XL



State and Federal political affiliation in the Moonah subdivision, 1910 - 1966. (Electoral Returns)

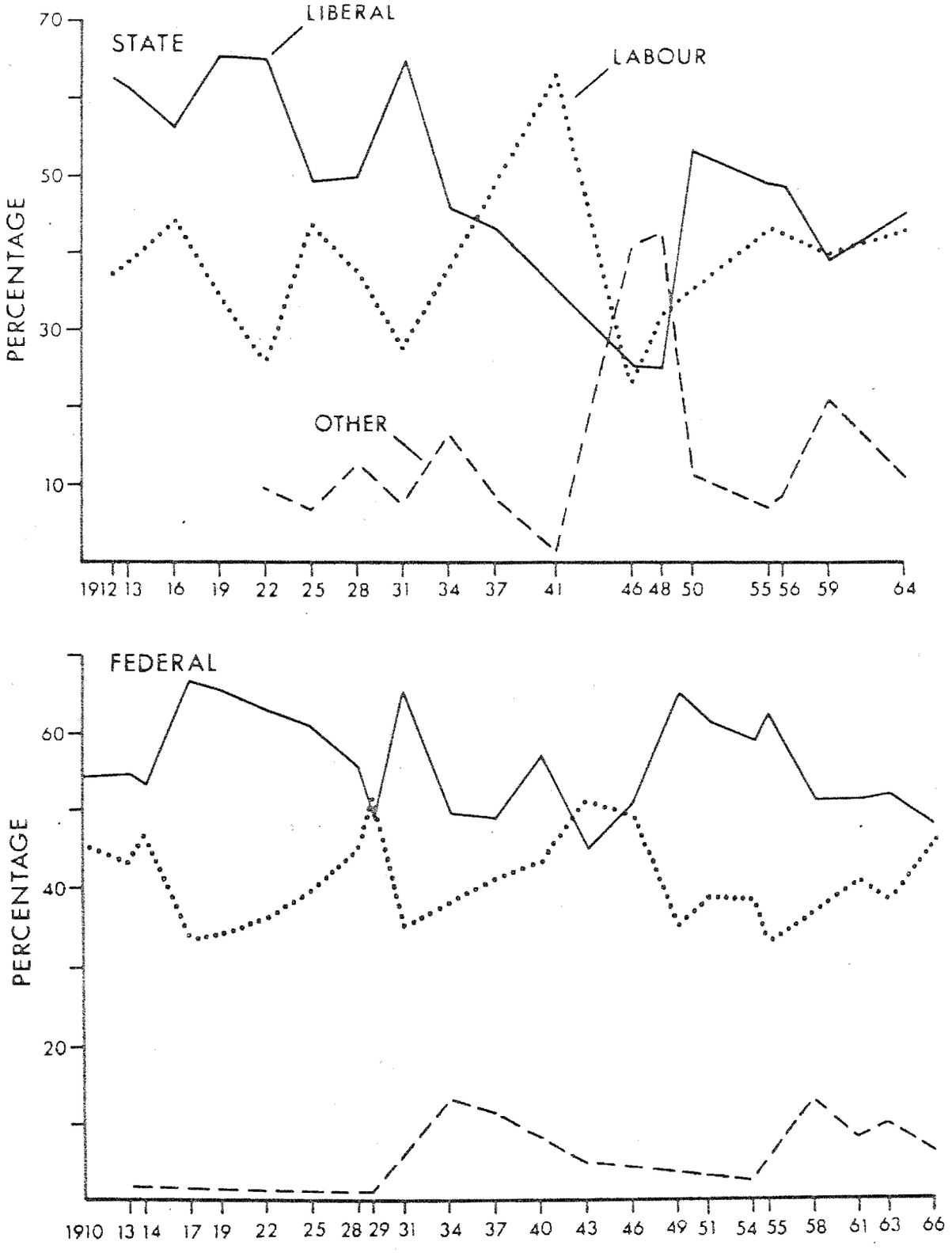
APPENDIX XL





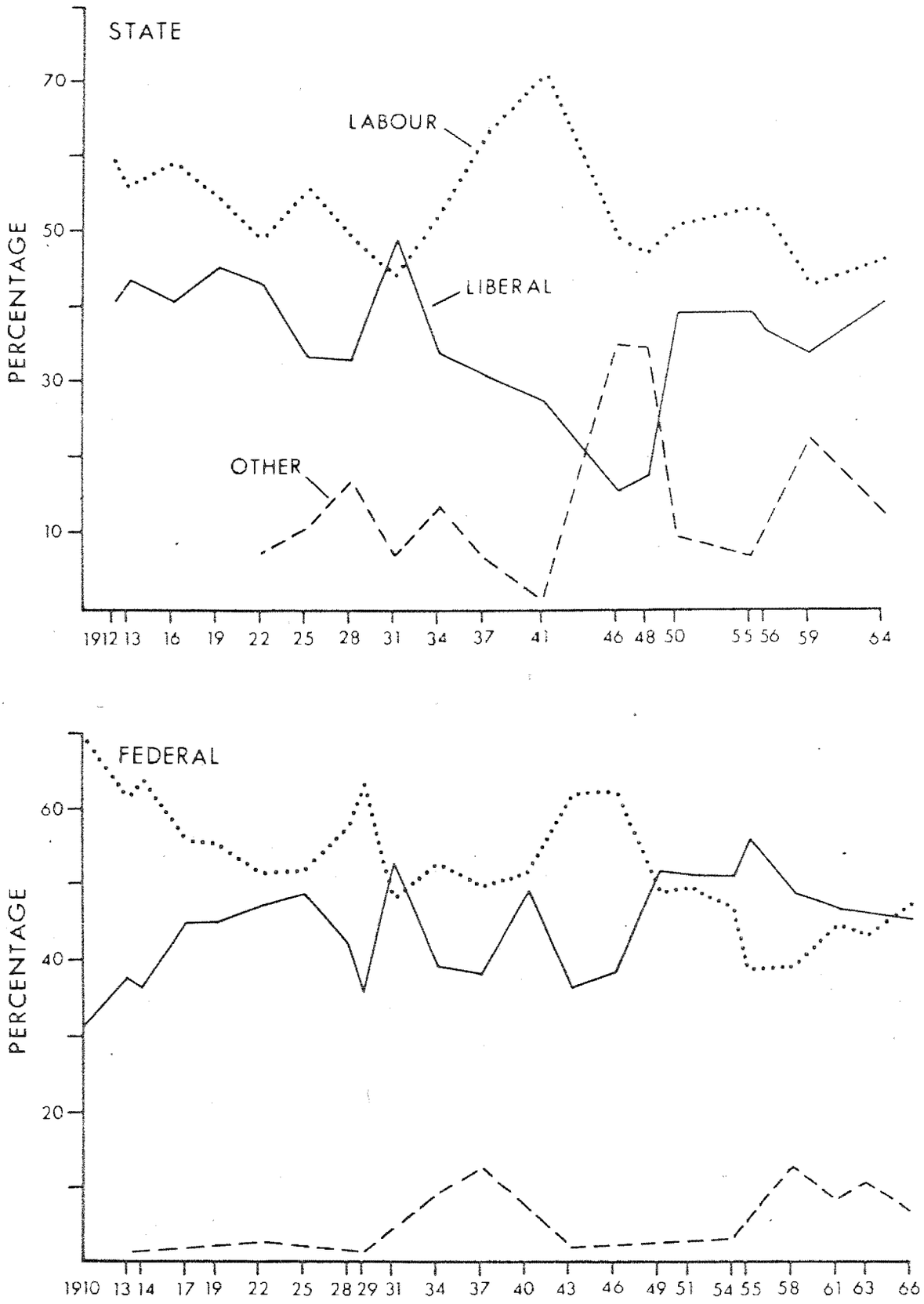
State and Federal political affiliation in the Nelson subdivision, 1910 - 1966. (Electoral Returns)

APPENDIX XL



State and Federal political affiliation in the Queenborough subdivision, 1910 - 1966. (Electoral Returns)

APPENDIX XL



State and Federal political affiliation in the West Hobart subdivision, 1910 - 1966. (Electoral Returns)

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Maps and Plans

1 Lands and Surveys Department

Hobart Number

1. Settlement blocks and rivulet, 1811 approved Macquarie (131 better).
2. Col. Sorell's location diagram.
3. Plan of proposed market place between lower Collins and Macquarie, 1827.
4. Hobart and vicinity.. 4" = 1 mile, 1827.
5. Hobart buildings and streets — brick, timber, under construction, 4 chains = 1", n.d.
6. Hunter island vicinity; allocation of blocks. n.d. (early).
7. Valuation map of H.T. periphery, c. 20 chains = 1", n.d.
8. Sullivan's Cove and environs, c. 2 chains = 1". n.d. (very early, idem 110).
9. Sullivan's Cove and settlement, c. 125' = 1", 1828.
10. Hobart rivulet course by G.P. Harris, n.d. (early).
11. Sullivan's Cove and environs, incl. bldgs., n.d. (early, painted).
12. H.T. early allotments and public buildings, n.d.
13. H.T. " " , c. 4 chains = 1", n.d.
14. Sullivan's Cove, Scott's line sketch, n.d. (early).
15. Plan Goulburn St. area, n.d.
16. Soundings Sullivan's Cove by Capt. Welsh, before 1827.
17. Sketch upper Liverpool St. area, n.d.
18. Allotments Macquarie St. - Garden Crescent, c. 2 chains = 1", n.d.
19. Port of H.T., New Wharf infill, 12.11.1840.
20. Proposed improvements Sullivan's Cove, 1839.
21. Campbell St. allotments, n.d.
22. Lots for sale Parson-Bathurst Sts., n.d.
23. Plan Kerr's property H.T., 2 ch. = 1", 1834.
24. Allotments H.T. Bathurst-Parson St., 1835.
25. Allotments Lansdowne Crescent area, n.d.

25a. " "

26. Idem 20.
27. 7 allotments Forest Rd. and Upper Liverpool St., 1836.
28. Lower Macquarie St., 1 ch. = 1", 1844.
29. Franklin Wharf-Constitution Dock, 1 ch. = 1", 1852.
30. Road widening Park-Liverpool, 1 ch. = 1", 1860.
31. Allotments Argyle St. block, n.d.

32. " " " "

33. Allotments Lansdowne Crescent - Poets Rd., n.d.
34. Hunter Is. allotments and vicinity, 1852.
35. Proposed extension Eliz. and Davey Sts., n.d.

36. Proposed St. between Davey and Morrison (Despard), n.d.

37. Similar 34, 1852.

38. Davey St. - Cove area; old Govt. House, and proposed extens. Elizabeth St. through it, 1852.

39. Hunter St. - Princes/Macquarie-Cove, 1850.

40. Dunn St. - Domain Pt., soundings; proposed reclamation Dunn-Hunter Sts., 1850.

41. New Market Place to Cove, 60 lks. = 1", c. 1853.

42. Part of Secheron (incl. cultivation), 1859.

43. Block Davey - Fitzroy Pl., Antill, c. 40 lks. = 1", 1850.

44. Allotments Anglesey-Elphinstone, Macquarie-Adelaide, 1847.

45. Macquarie-Holebrooke, Elphinstone-Elboden, (Sprent), 1847.

46. Anglesey-Macquarie-rivulet, (Sprent), 1847.

47. Davey-Adelaide, Elphinstone-Anglesey, (Sprent), 1847.

48. Adelaide-Macquarie vicinity, (Sprent), 1847.

49. Allotment Liverpool-Forest Rd., 1847.

50. Adelaide-Holebrooke allotments, (Sprent), 1847.

51. Allotments Park-Letitia, 2 ch. = 1", 1858.

52. Allotments Park St., c. 133 lks. = 1", prob. 1858.

53. Park-Argyle Allotments, 2 ch. = 1", 1859.

54. Park St. allotments, quarry North, 2 ch. = 1", 1859.

55. Old convict garden, Glebe, 60 lks. = 1", 1860

56. Allotments Davey-Despard, Murray-Brooke, 60 links = 1", 1858.

57. Warwick-Paternoster, 60 lks. = 1", 1859.

58. Paternoster-Patrick, 20'=1", 1860.

59. Forest Rd., excavations, 1ch. = 1", n.d.

60. Macquarie-Cascade Rd. allots., 50 lks. = 1", n.d.

61. Proposed Albuera St., 1 ch. = 1", 1857.

62. Allots. Macquarie-Davey-Despard, 1859.

63. Allotment claim Goulburn St., 1867.

64. Line of Eliz. St. and allots. Macquarie-Davey, 1ch. = 1", 1859.

65. Reformatory and insane hospital sites, 60 lks. - 1", 1884.

66. School site, Eliz. and Warwick, 30 lks. = 1", 1834.

67. Old gaol site Murray & Macqu; values, 8'=1", c.1857.

68. similar 67, less detail.

69. Town Hall-Roy. Socy. sites, 60' = 1", 1861.

70. Lansdowne Cres. vicinity allots., c. 3/4 ch. = 1", 1855.

71. Allots. around quarry, Arthur, Mary, Quarry Sts., 1 ch. = 1", 1863.

71a. Proposed street through Wellington bldgs., Quarry St. area, 50 lks. = 1", 1899.

72. Digney St. - S. Bay rivulet, 1 ch. = 1", 1859.

73. Digney St. - Garden Cres. (Fitzroy Gdns.), 1ch. = 1", 1865.

74. Proposed Digney St., 1 ch. = 1", 1865.

75. Allotments, incl. White Pheasant Inn and stable, Goulburn St., 10'=1", 1867.

76. Allotment Salamanca Pl., 30'=1", 1875.

77. Waterfront, (little detail, but large scale), 1879.

78. New wharf, 40'=1", 1879.
79. Allots. Macquarie St. - rivulet, 50 lks. = 1", 1881.
80. Poets Rd. - Bonnington Rd., 60 lks. = 1", 1881.
81. Allotment Knocklofty Terr., 60 lks. = 1", 1882.
82. Allots. Goulburn and Molle St., 20'=1", 1882.
83. Allots. Murray near Bathurst, 20'=1", 1882.
84. Argyle-Dunn, Macquarie-Davey, 50 lks. = 1", 1882.
85. Allots. Patrick St. vicinity, 50 lks. = 1", 1883.
86. Allots. Colville and Mona, 15'=1", 1883.
87. Sullivan Cove and Marine Board Land, c. 40'=1", 1883.
88. Napoleon St.-S.Bay Rivulet allots., 20'=1", 1884.
89. Quayle St. allots., 40 lks.=1", 1885.
90. Fisherman's Dock and surrounds, 1 ch. = 1", 1885.
91. Allots. Bathurst & Elizabeth, 30 lks. = 1", 1888.
92. Sullivan's Cove & allots. in vicinity, 1ch. = 1", 1861
93. Allots. N. & W. of centre, 6 ch. = 1", c. 1870
94. Domain Derwent shore, Park St., 4ch.=1", 1894
94a. Govt. House grounds, 100'=1", 1939-42.
95. St. George's Hill allots. (Quayle-St. G. Terr.), 100'=1", 1874.
96. Allots. for sale Battery Pt. (Colville, Mona etc.), 1859.
97. Plan of Military Barracks, c. 40'=1", c. 1900.
98. Allots. Argyle St.-New Town Rd., 1ch.=1", 1885.
99. Idem.
100. The Catholic Glebe, allots., 40'=1", 1887.
101. Battery Pt. Allots. (St. G. Terr.-Cromwell), n.d.
102. " " " (Colville-Mona-Marine Terr.),c.40'=1", 1874.
103. Allots. Lansdowne Cres. & environs, 4ch.=1", 1888.
104. Allots. Warwick-Cove, Antill-Campbell, 4ch.=1", n.d.
105. " Argyle-Letitia, Colville-Smith.
106. Hobart & suburbs, streets, pub. bldgs., 10ch.=1", 1890.
107. Allots. Rivulet-Holebrooke Pl., D'Arcy-Elboden, 2ch.=1", 1894.
108. Allots. Argyle-Letitia, George-Smith, 2ch.=1", 1889.
109. Allots. Quarry Reserve, Park St., 20'=1", 1894.
110. Sullivan Cove and immed. environs, 2ch. = 1", (Frankland), 1832.
111. Fitzroy Pl. - Montpelier R. (Sprent's Book, p. 25).
112. Montpelier R. - Hampden Rd. (Sprent's Book, p. 31).
113. Upper Bathurst, Goulburn Sts. area (Sprent's Book, p. 61).
114. Hunter St. - Murray St. (Sprent's Book, p. 75).
115. Cnr. Eliz. & Liverpool, 8' = 1", 1895.
116. Collins-Harrington, 10'-1", 1895.
117. Proposed railway stn. extension, 1ch.=1", 1891.
118. Quayle St. widening, 1897.
119. Molle-Liverpool allots., 20 lks.=1", 1898.
120. Washington-D'Arcy-Wentworth cnr., 1ch.=1", 1890.
121. Hunter St. area, 30 lks. =1", 1901.
122. Davies Bros. right of way from Elizabeth, 20 lks.=1", 1902.

123. Macquarie-Elphinstone allots., 80 lks.=1", 1903.

124. Hobart Harbour; soundings, c. 100'=1", 1904.

125. Metrop. Drainage Bd. sewer easement Macquarie Pt., 66 lks.=1",1907.

126. Similar 125, 60 lks. = 1", 1908.

127. Domain University site and bldgs., 30'=1", 1908.

128. Barracks, Davey and Molle, 1 ch. = 1", 1908.

129. Allots. Constit. Dock-rlwy. stn., 1909.

130. Warwick St. & Harrington St. area, 60 lks.=1", 1911.

131. Meehan's plan (copy) of H.T. made by order Gov. Macquarie 1811, c. 5ch=1", 1811.

132. Hobart Harbour and Domain, c.200'-1", 1916.

133. Rivulet behind Hunter St., 40 lks. = 1", 1913.

134. Allots. Wentworth-Wellesley values, 60 lks.=1", 1914.

135. similar 134.

136. Allots. Brisbane-Melville, 40 lks.=1", 1918.

137. Subdivision Quayle St., auction, 40'=1", 1921.

138. Castray Esplanade vicinity, 30 lks.=1", 1923.

139. Secheron subdivision, 1925.

140. Albuera St. allot., 1ch. =1", 1925.

140a. Derwent Rowing Club site, 40 lks.=1", 1926.

141. Cattle jetties area, 80 lks.=1", 1926.

142. City of Hobart street plan (New Town Bay - Long Beach - Cascades), 12 ch.=1", n.d.

143. Nutgrove subdiv., 1933.

144. Upper Liverpool allots., 40'=1", 1937.

145. Marine Bd. reclaimed area for leasing nr. Ocean Pier, 150 lks.= 1", 1927.

146. Hobart Harbour and domain; surroundings (like 132), 200' = 1", 1937.

147. Allots. Upper Liverpool-Cosgrove-Rivulet, 30'=1", 1939.

148. Dunkley's Pt., 60 lks.=1", 1940.

149. Allots. Augusta Rd.-Wellwood St.- Giblin St., 80 lks.=1", 1940.

150. Barracks and Repat. Hospital, Molle-Hampden, 80'=1", 1943.

150a. Repat. Hospital, 40'=1", 1944.

151. Rifle Range (Univ. site), 6ch.=1", 1943.

152. Allots. Gregson Ave.-Forster St., 40'=1", 1937.

153. Maryville Esplanade reclamation, 2ch.=1", 1943.

154. Hobart St. plan, Prince of Wales Bay - Lower Sandy Bay, 1-ch.=1", n.d.

155. Hobart Harbour, 100' = 1", 1944.

156. Naval oil pipeline easement, 200'=1", 1945.

157. Upper Liverpool St. allots., 30'=1", 1941.

158. Allots. Ingram St. area, 40'=1", 1946.

159. Educ. Dept. grant near New Town Rivulet, 100'=1", 1949.

160. Proposed road through Univ., Earl-Grosvenor Sts., 80'=1", 1948.

161. Cox Bros. site Murray St., 20'=1", 1948.

162. Oil storage nr. Cornelian Bay, 200'=1", 1951.
163. Allots. Eliz. nr. Warwick, 10'=1", 1906-1951.
164. Maning reef reclamation scheme, 44'=1", 1951.
165. Allots. New Town Rd.-Archer-Box Vista, 40'=1", 1952.

Other

Hobart streets and allots. sheets 1-8, 3ch=1", 1895.
Intercolonial Exhibition of Industry Chart, 1866, including
Plan of Hobart 1829
Plan of Hobart 1866
Plan of Hobart 1811
Plan of Hobart 1806

A. 7 Hobart and suburbs, 1889.
18 " " " n.d. (recent).
H. 16 Natural Harbours etc., (Hardy), 1885.

Sprent's Survey 1841-2 (74 detailed plans of H.T. blocks in bound volume)

1. Murray-Harrington / Patrick-Melville
2. Elboden-Antill / Macquarie-Garden Crescent
3. Elizabeth-Veterans Row / High-Burnett
4. Unfin. sketch on Macquarie St.
5. Harrington-Barrack / Melville-Brisbane
6. Murray-Harrington / Collins-Bathurst
7. Elizabeth-Argyle / Brisbane-Melville
8. Salamanca Place - Old Market, and Customs facade
9. Murray-Salamanca / Customs House-Davey
10. Murray-Salamanca / Custom House Place - Davey
11. Barrack-Molle / Collins-Goulburn
12. Salamanca-Harrington / Davey-George
13. " " / George-Montpelier R.
14. Harrington-Barrack / Brisbane-Patrick (no.bldgs.).
15. Elizabeth-Argyle / Liverpool - Collins
16. Rivulet-Campbell / Bathurst-Brisbane
17. Barrack-Hill / Patrick-Brisbane
18. Harrington-Hampden / Montpelier-Wilmot
19. " " / Wilmot-Davey
20. Argyle-Campbell / Collins-Liverpool
21. Elizabeth-Murray / Melville-Patrick
22. Davey-Montpelier / Hampden-Albuera
23. Campbell-Park / Collins-Liverpool
24. Hill-Knocklofty / Adelaide-Lansdowne

25. Fitzroy-Montpelier / Albuera-Byron-Rivulet (idem, Hobart 111)
25a. Lansdowne / Augustus Tce. / Knocklofty
26. Elizabeth-Murray / Liverpool-Melville
27. Elizabeth-Argyle / Brisbane-Patrick
28. Elizabeth-Harrington / Patrick-Warwick
29. Garden Crescent - Rivulet / Elboden-Fitzroy
30. Elizabeth-Argyle / Liverpool-Melville
31. Montpelier R.-Hampden Rd. (idem, Hobart 112)
32. Argyle-Campbell / Bathurst-Liverpool
33. Harrington-Hill / Warwick-Patrick
34. Augustus Tce. - Princes / Knocklofty-Hill
35. Campbell-Park / Bathurst-Liverpool
36. Montpelier-De Witt / Hampden - St. George's.
37. Harrington-Barrack / Collins-Goulburn
38. Argyle-Campbell + / Brisbane-Patrick
39. De Witt-Napoleon + / Hampden-Trumpeter-Cromwell
40. Barrack-Molle / Liverpool-Goulburn
41. Davey-Murray / Collins-Harrington
42. Argyle-Domain Rivulet / Patrick-Warwick
43. Knocklofty-Hill / Arthur-Adelaide
44. Hampden-Colville-Napoleon / Derwent off Battery Point
45. Molle-Hope / Liverpool-Goulburn
46. Arthur-Wellington / Veterans Row-Lochner +
47. Warwick-Wellington / Murray-Veterans-Hill
48. Domain Rivulet-Argyle/Smith-Warwick
49. Barrack- / Davey-Macquarie
50. Barrack-Molle / Davey-Collins
51. Molle-Antill / Fitzroy-Macquarie
52. Elizabeth-Church / Warwick-Patrick
53. Elizabeth-Church / Warwick-High
54. Murray-Harrington / Melville-Bathurst
55. Argyle-Church / Warwick-High
56. Harrington-Barrack / Davey-Collins
57. " " / Goulburn-Melville
58. Barrack-Upper Molle / Brisbane-Melville
59. Barrack-Molle / Goulburn-Melville
60. Argyle-Church / Patrick-Warwick
61. Upper Bathurst, Goulburn Sts. area (idem, Hobart 113)
62. Forest-Goulburn-Milton (Rivulet) / Hope -
63. Elizabeth-Murray / Macquarie-Collins
64. Elizabeth-Veterans-Murray / Warwick-Tasma (High)
65. Elizabeth-Market Place / Macquarie-Collins
66. Campbell-Argyle / Brisbane-Bathurst

67. Elizabeth-Argyle / Burnett- town boundary +
68. " " " - High
69. Molle-Gore / Macquarie-Rivulet & Liverpool
70. Gore vicinity / Macquarie-Milton
71. Old Market-Rivulet / Macquarie-Collins + Rivulet
72. Elizabeth-Arthur / Burnett- town boundary
73. Gore- / Macquarie-Rivulet
74. Elizabeth-Murray / Collins-Liverpool

2. State Archives

(a) Colonial Secretary's Office File

CSO 1/867/18344	Alienated land south of Hobart.
CSO 8/17/578	Hobart Census boundaries 1841.
CSO 24/264/4482	Unoccupied crown land in Hobart and suburbs, 1850.
CSO 24/33/970	Sullivan's Cove, Survey Dept. map, 1852.

(b) Lands and Surveys Department Volumes

LSD 1/2/p. 503	Part of Macquarie Street and River Derwent, 1837.
LSD 1/3/555	Sketch of allotments in Glenorchy area, 1831.
LSD 1/3/603	Old market place near Collins Street, 1826.
LSD 1/3/618	Market Place, Macquarie and Collins Sts., allotments, 1831.
LSD 1/6/233 & 235	Grants in Liverpool Street, c. 1821.
LSD 1/8/370	Grants along New Town Road, 1829.
LSD 1/10/299	Grants near Town Rivulet, 1827.
LSD 1/11/483	Lower Murray Street near Parliament House, lots for sale, 1" - 1ch., 1845.
LSD 1/14/25	Grants near Cascades, 1838
LSD/1/14/500, 506 514, 518	Sketch of Glebe Land at New Town, Cornelian & New Town Bays, 1841.
LSD 1/15/562	Bellerive, showing allotments, 8" to 1 mile, 1850.
LSD 1/16/442	Plan of wharves, 1839.
LSD 1/16/626	Macquarie, Harrington and Collins Sts., Town Rivulet and allotments, 1839.
LSD 1/20/145	Grants near Domain, 2 chn. = 1 inch, 1835.
LSD 1/20/147	Govt. Domain, New Town Road and Argyle St., 10 chains to 1".
LSD 1/20/590	12 allotments of building ground at Battery Point, 1837, 1 1/2" to 1 chain.
LSD 1/20/592	Proposed street at Battery Point, 2 chains to 1", 1846.
LSD 1/20/608	Sullivan's Cove, Battery allotment, 1846.
LSD 1/24/318	Allotments for sale in Park and Argyle Sts., 2 chains to 1", 1859.
LSD 1/28/98	Collins, Barrack and Macquarie Sts., land to be sold in allotments, 1" to 1 chain, 1845.

LSD 1/33/397	Grants in some of the streets, 1832.
LSD 1/36/254	New Town showing Arnold, Arthur and Stephen Sts., and old coal pit, 1864.
LSD 1/41/177	Lots in Birch's Estate, 1854.
LSD 1/41/896	Argyle and Macquarie Sts., 1" to 1 chain, 1856.
LSD 1/41/906	Grants along Collins Street.
LSD 1/45/120	Bellerive, 2 chains to 1", 1856.
LSD 1/47/297	Cascade Factory and Hobart Ribulet, 1844.
LSD 1/47/316	Grants in the township of Hobart Town, 1845.
LSD 1/49/202 & 204	Bellerive, 1856 (similar 1/45/120)
LSD 1/50/215 & 223	Constitution Dock and Dunn St., 1 chain to 1", 1864.
LSD 1/50/363	Domain, Rivulet and Park Street, 2 chains to 1", 1858.
LSD 1/51/266	Lots for sale in Mt. Stuart Road and New Town Road, 1857.
LSD 1/51/268	Salamanca Place, Murray and Davey Sts., 2 chains to 1", 1846.
LSD 1/52/110	Elizabeth and Melville Sts., 50 links to 1", 1843.
LSD 1/53/351	Position of Prisoners Barracks, 1836.
LSD 1/54/255	Franklin Wharf, Murray and Elizabeth Sts., 1 chain to 1", 1847.
LSD 1/54/287	Salamanca Place, lots reserved for public purposes 60 links to 1", 1855.
LSD 1/54/538	Murray, Forth and Brooke Sts., 60 links to 1", 1851.
LSD 1/58/307 309 & 310	Sketches of allotments of land to be sold, 1863. 1. Murray and Harrington Sts. 2. Argyle St. 3. Macquarie St. 4. Liverpool St. and Chapel Road
LSD 1/58/312	Pedder, Arthur and Forster Sts., 3 chains to 1".
LSD 1/63/424	Liverpool, Macquarie, Collins Sts., and Rivulet, 1" to 1 chain, 1843.
LSD 1/67/483	Grants between Macquarie and Davey Streets, 1839.
LSD 1/68/70, 76, 92, 94, 96	Custom House Area, 60 links = 1 inch, 1851.
LSD 1/68/516, 518	Patrick and Elizabeth Streets, 1 ch. = 1 in.,1838.
LSD 1/68/812	Property of the Crown, 1842.
LSD 1/72/2	Constitution Dock, 1851.
LSD 1/72/9 a & b	Sandy Bay Rivulet.
LSD 1/94/311	Boundaries of the Glebe, 1834.
LSD 1/96/235	Plan of Market 1852, 20 ft. = 1 inch.
LSD 1/96/335	Grants around Murray and Macquarie Streets, 1860.
LSD 1/97/444	Map showing Hobart Town as far south as Davey Street, 29 Dec., 1843.
LSD 1/98/70	Queens Battery 11 Aug. 1864.
LSD 1/98/86	Map showing Garden Crescent (now Fitzroy Gardens) 27 Sept., 1845.

LSD 1/102/406	Grants west of the Domain, Main road to New Town, 60 links = 1 inch.
LSD 1/103/323	Hobart Rivulet, James Luchman's Mill site, 1830.
LSD 1/104/351	Grants in Argyle Street
LSD 1/105/50	Grants in Melville Street, 1831.
LSD 1/105/74	Grants in some of the main streets of Hobart 1831.
GO/33/21	Sullivan's Cove and adjacent buildings, 1826.
GO/33/21/291	Proposed wharf area, 1836.
GO/33/53/529	Proposed waterworks, 10 ch. = 1", 1841.

3. Royal Society of Tasmania

C6	Proposed plan H.T., 1811 (also L. & S.)
C7	Map and street directory (Proeschel), c.1859.
C7	H.T. - Battery Pt. from Commissioner' report, 1826.
C7	Sketch plan of town area, 1826.
C7	Cottage Green property, 3 charts, one c. 1820.
C18	Walch's map of H.T. & suburbs (Reid),n.d. (c.1890).
C18 D15	Early plan of Hobart, n.d.
C18 D15 912.946	Inset Hobart on Frankland's V.D.L. map, 1839.

4. Marine Board of Hobart

1. Hobart wharves, proposed improvements, 2 ch. = 1", 1888.
2. Hobart Harbour, c.100' = 1", 1904.
3. Harbour facilities, (Mault), 1889.
4. Hobart Harbour, 2 ch. = 1", 1840, G.O./1239
5. Sullivan Cove, 1858.
6. Hobart Harbour, 200' = 1", 1947, G.O./1108.
7. " " , proposed developments, 200'-1", 1950, G.O./1233.
8. Port of Hobart, 200' = 1", 1960, G.O./1123.

   Proposed developments, 1957, Centenary Brochure.

5. Public Record Office, London

MPD 116/1-8	Plans and elevations of Govt. House, 1827-28.
MPD 117/1-3	Sullivan Cove and section through proposed New Wharf, (J. Lee Archer), 1827.
MPG 660/1-2	Dormitory and new nursery, Cascades; plan, elevation, sections, 1849.
MPG 672/2-3	Old wharf station, Hobart Town; plan, elevations and isometrical view, 1849.
MPG 672/4	Plan of the wharves, Hobart Town.
MPG 673/1	Allotments Liverpool St. - Forest Rd. - Salvator Rosa's Glen, 1850.

MPG 678	V.D.L. divided into electoral districts, 1851.
MPG 686/1-2	Custom House building, NE end; plans, elevation, 1839.
MPG 687	Harbour and town adjacent, 1851.
MPG 688	Orphan School additions and alterations, 1852.
MPG 689/2	V.D.L. divided into electoral districts, 1852.
MPG 699/1-2	Additions to Court House, Hobart Town.
MPG 700	NE and SE Tasmania, 1838.
MPG 700/3	Coast batteries, River Derwent, 1838.
MPG 702	Convict hospital, Hobart, c. 1838.
MPG 704	Harbour, Battery Pt. - Macquarie Pt., 3ch.= 1", 1838.
MPG 709/1	Probation stations, V.D.L., 1845.
MPG 711	Proposed aqueduct and reticulation for pure water supply, Hobart Town, 10 ch. = 1", 1841.
MPG 712	Plan of Hobart Town, 1848.
MPG 715	Proposed Hobart harbour defences, 1854.
MPG 716/1	Harbour and allotments to Macquarie St., 1 ch. = 1", 1855.
MPG 716/2-8	Proposed Govt. House; plans and elevations, 1854.
MPG 717	Moveable station for working parties, 1845.
MPG 787/1	Part of V.D.L. with districts, 1828.
MPG 787/2	Design for Chaplain's cottage, 1828.
MPG 787/3	Design for parochial church or chapel
MPG 807	Port Arthur settlement, 1866 (?).
MPG 809	Port of Hobart Town, proposed batteries.
MPGG 5	Proposed additions and alterations to Female House of Correction, 1850.
MPH 78/2	idem MPG 715
MPH 85/1	Plan of barracks, 1844.
MPH 85/2	Commissariat office.
MPH 85/3	Commissariat store.
MPH 85/4	Main guard.
MPH 85/5	Battery and Ordnance stores.
MPH 86/2	Plan of barracks area, Hobart, 1844.
MPH 86/3	Plan of Ordnance store, Princes Wharf.
MPH 87	Land in dispute in Civil Engineers' Dept. area, 1849.
MR 377	V.D.L. Company's proposed eastern locations, 1833.
MR 378/1	V.D.L. Company's western locations, 1832.
MR 378/2	idem MR 377
MR 392/1-4	V.D.L. Company's holdings, 1846.
MR 393/1	Trig. triangulation stations, eastern V.D.L.
MR 393/1	Glamorgan county, 1848.
MR 414/1	idem MPG 700/3.
MR 414/4	idem MPH 78/2

MR 414/5 Prince of Wales Battery, plan and section, 1854.

MR 414/6 Derwent estuary, Risdon- N.Bruny Is., 1854.

MR 414/7 Tamar estuary, Bass Strait - Launceston, 1854.

6. British Museum

92414 (1) Two maps of Tasmania (John Vail), 1905.

(i) railways, alienated and agricultural lands etc.

(ii) timbered areas, sawmills

92488 (3) Map of V.D.L. with insets of Hobart and Launceston (Joseph Cross), 1836.

92492 (2) Plan of City of Hobart Town; main buildings (Jas. Thomson), 8" = 1 mi.

92492 (15) Hobart Town, Limekiln Reserve lots for sale, 1864.

92492 (37) Plan of Barracks, 1" = 60 lks., 1868 (?).

92492 (58) Military sketch of Hobart Town (Augustus Fred Smith), 1: 31,680, 1849.

92492 (59) Walch's plan of Hobart Town and suburbs (Albert Reid), 1: 11,088, 1870.

188 K 4 (4) View of Hobart (von Guérard), 1855.

188 R 1 (2) Hobart, with buildings named (Huggins).